



College AND UNIVERSITY Business

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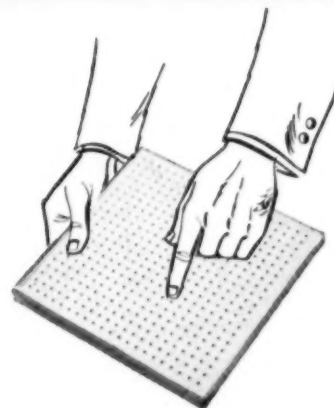
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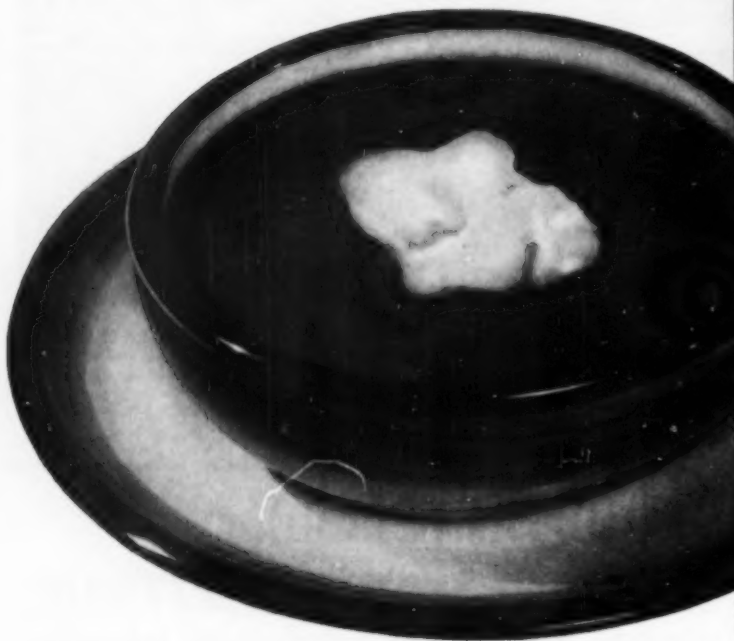


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College AND UNIVERSITY Business



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Published monthly by The Nation's Schools Division, The Modern Hospital Publishing Co., Inc., 919 North Michigan, Chicago 11, Ill., U.S.A. Raymond P. Sloan, president; Stanley R. Clague, vice president and secretary; Everett W. Jones, vice president; Peter Ball, vice president; John P. McDermott, treasurer. Copyright 1954, by The Nation's Schools Division, The Modern Hospital Publishing Co., Inc. Single copies, 50 cents. Acceptance under Section 34.64, P.L.&R., authorized. Published on the tenth of the month of the date of issue. Change of address should be sent 30 days in advance of publication date.

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Among the Authors



Arnold F. Emch

DR. ARNOLD F. EMCH, partner in the management consulting firm of Booz, Allen & Hamilton, suggests on page 19 the significant factors that should be reviewed by institutional administrators in determining whether they need the services of an outside management consultant. Dr. Emch has been a member of the management consulting firm since 1942. Prior to that time he was attached to the office of the Secretary of the Navy in Washington helping develop a management engineering study of the entire organization of the office of the vice chief of naval operations. He also served as special assistant, with the rank of lieutenant commander, to Adm. Ross T. McIntire, surgeon general of the navy during World War II. Prior to his work with the government, he had been executive director of the Chicago Hospital Council and assistant secretary of the American Hospital Association in Chicago.



Donald A. Baker

DONALD A. BAKER, managing editor of the *Insurance Salesman*, a publication devoted to the development of sales ideas in the field of life and accident and health insurance, suggests on page 22 the way in which life insurance can be successfully utilized as a fund raising device by colleges and universities. Mr. Baker is active in insurance organization work in Indianapolis and the state of Indiana. At one time he was in the sales department of Procter and Gamble. During World War II he served for two years in the air force in the Pacific theater and was named a candidate for West Point while serving in New Guinea. Mr. Baker is married and the father of two daughters.



Henry M. Wriston

DR. HENRY M. WRISTON, president of Brown University since 1937, outlines on page 30 his philosophy concerning the function of the college presidency in contemporary higher education in America. Dr. Wriston has been active in higher education affairs since he became president of Lawrence College in Wisconsin in 1925. A past president of the North Central Association of Colleges and Secondary Schools and the Association of American Colleges, he, more recently, was president of the Association of American Universities. He has been awarded honorary degrees by 11 universities, including Wesleyan, Columbia, Harvard and Princeton.



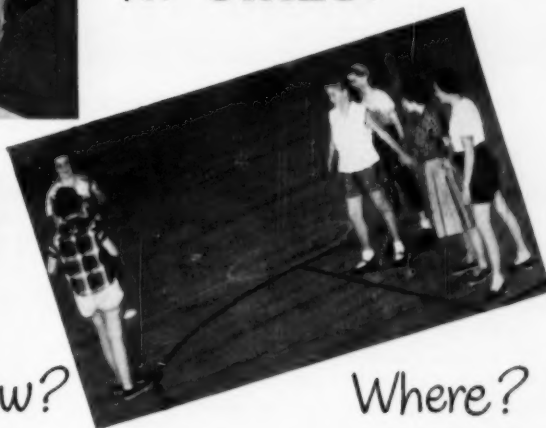
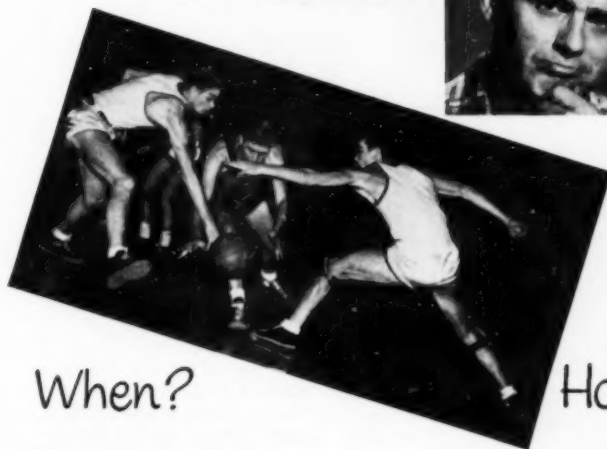
McRay Cloward

MCRAY CLOWARD, manager of student housing, College of Southern Utah, Cedar City, on page 37 emphasizes that small colleges can build good student housing even though the funds available might be considered inadequate by some larger institutions. In addition to his duties in house management, Mr. Cloward is also bookstore manager, employment coordinator and instructor in business administration. Before joining the staff of the college, Mr. Cloward served three years with the army, chiefly in France and Germany. He is active in community affairs and has had important posts in the local Kiwanis Club. He handles local promotion for the Red Cross first-aid program.

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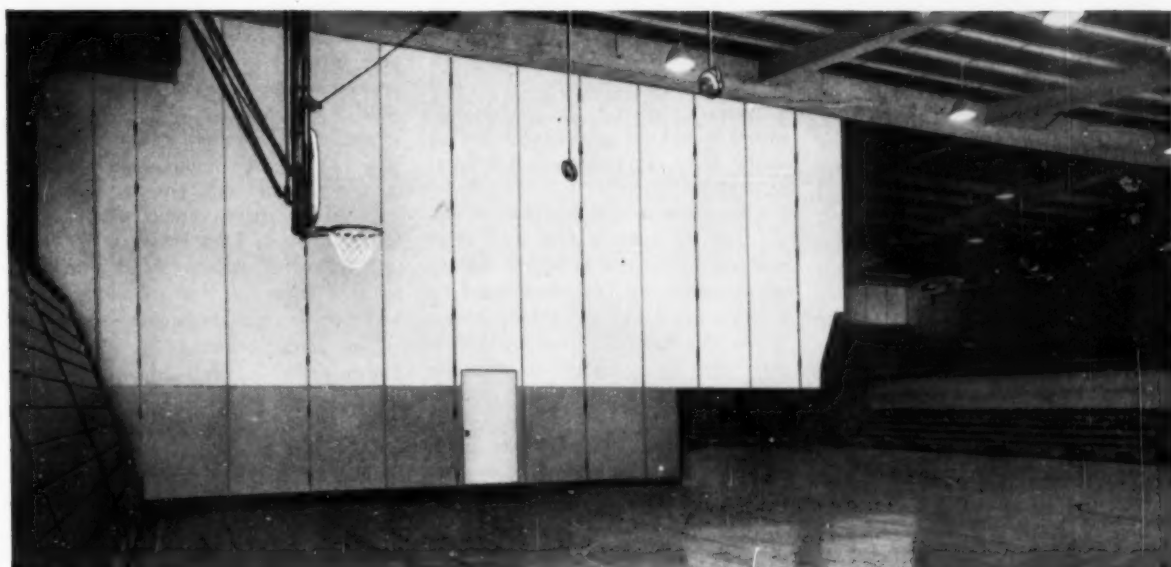


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Questions and Answers

Maintenance Standards

Question: Who should determine the standard of maintenance in college buildings: the business manager or the superintendent of buildings and grounds?—C.T., Calif.

ANSWER NO. 1: This is frequently a moot question. However, it is my belief that generally the business manager will not be competent to establish maintenance standards. He probably will be the first one to admit this. He may decide, for instance, whether the painting program *appears* to be adequate, but one would not expect him to have the technical knowledge required to establish standards involving plumbing, heating, lighting, air conditioning, roofing, carpentry, masonry and so forth.

It is my belief, therefore, that the superintendent of buildings and grounds, with the aid of his staff, should submit a budget that he believes will provide funds for an adequate maintenance program, with some additional allowance to combat obsolescence. If the business manager then arbitrarily lowers standards, that may be his privilege, but he must take the responsibility for so doing. If he does so because of budget deficiencies, the condition is, of course, regrettable, but should be called to the attention of the governing board. If maintenance standards are lowered one cannot take refuge behind the statement that maintenance is being delayed. Delayed maintenance spells neglect, period.—A. F. GALLISTEL, *director of physical plant planning, University of Wisconsin.*

ANSWER NO. 2: To reply to the question as stated, I believe that the final determination should be made by the business manager. This official is all too familiar with the limitations imposed by matters of budget. He has at heart (or he should not be a business manager) the interests of all institutional activities and must determine the allocation of funds so that the over-all welfare of the college or university is promoted. However, no

business manager should ever forget that the superintendent is an important member of his staff. The superintendent is an expert in matters pertaining to maintenance, repairs, and alterations. He knows that a low level of maintenance, bordering on neglect, is more costly over a long period of time. (Cutting corners oftentimes results in false economy.)

The business manager should realize that too low a maintenance level not only may prove expensive eventually but, when discovered by members of the governing board or, if a public institution, by a legislative visiting committee, will invoke censure on the person or persons responsible. Good maintenance protects the original investment and no governing board or public body can condone carelessness or neglect.

I know of several instances where the level of maintenance, both exterior and interiors of buildings, including custodial care, was established by a committee of the governing board. While this has certain advantages, it may result in a somewhat inflexible plan of operation and is not recommended.

To summarize, the business manager should have the final authority. However, institutional teamwork with proper regard for the problems of others should determine a reasonable level of maintenance (efficiently and

without frills), producing clean, well kept, weatherproof buildings that are a source of pride for management, faculty, students and the public.—HENRY L. DOTEN, *business manager, University of Maine.*

Public Relations

Question: To what extent should a college business manager concern himself with improving the public relations program of his institution?—K.F., Conn.

ANSWER: In accepting an appointment to the position, a college business manager automatically acquires a responsibility for the public relations program of his institution. No other position of the college, with the possible exception of the president, affects so many of the publics of the institution. At one time or another, students, faculty, alumni, staff, parents, donors and vendors have contact with the business office. Their opinions of the institution will undoubtedly be affected by the nature of their relationships with the business manager.

The business manager may find that he is being hampered in the discharge of his duties by a poor public relations situation created outside his office. This, too, is his concern, but requires a different method of approach. The solution should be sought within the framework of institutional organization and policy. If the college has no policy on the matter or if the responsibility is unassigned, the business manager should confine his public relations activities to the sphere of his own office until such a determination has been made by the policy making group in his own institution.

The public relations function is essentially one of interpretation of policy to the various publics of the institution. As such, the office must operate close to the policy making level and must have a designated authority commensurate with the responsibility involved.—WILLIAM JELLEY, *executive vice president, King's College, Delaware.*

If you have a question on business or departmental administration that you would like to have answered, send your query to COLLEGE and UNIVERSITY BUSINESS, 919 North Michigan Avenue, Chicago 11, Ill. Questions will be forwarded to leaders in appropriate college and university fields for authoritative replies. Answers will be published in forthcoming issues. No answers will be handled through correspondence.

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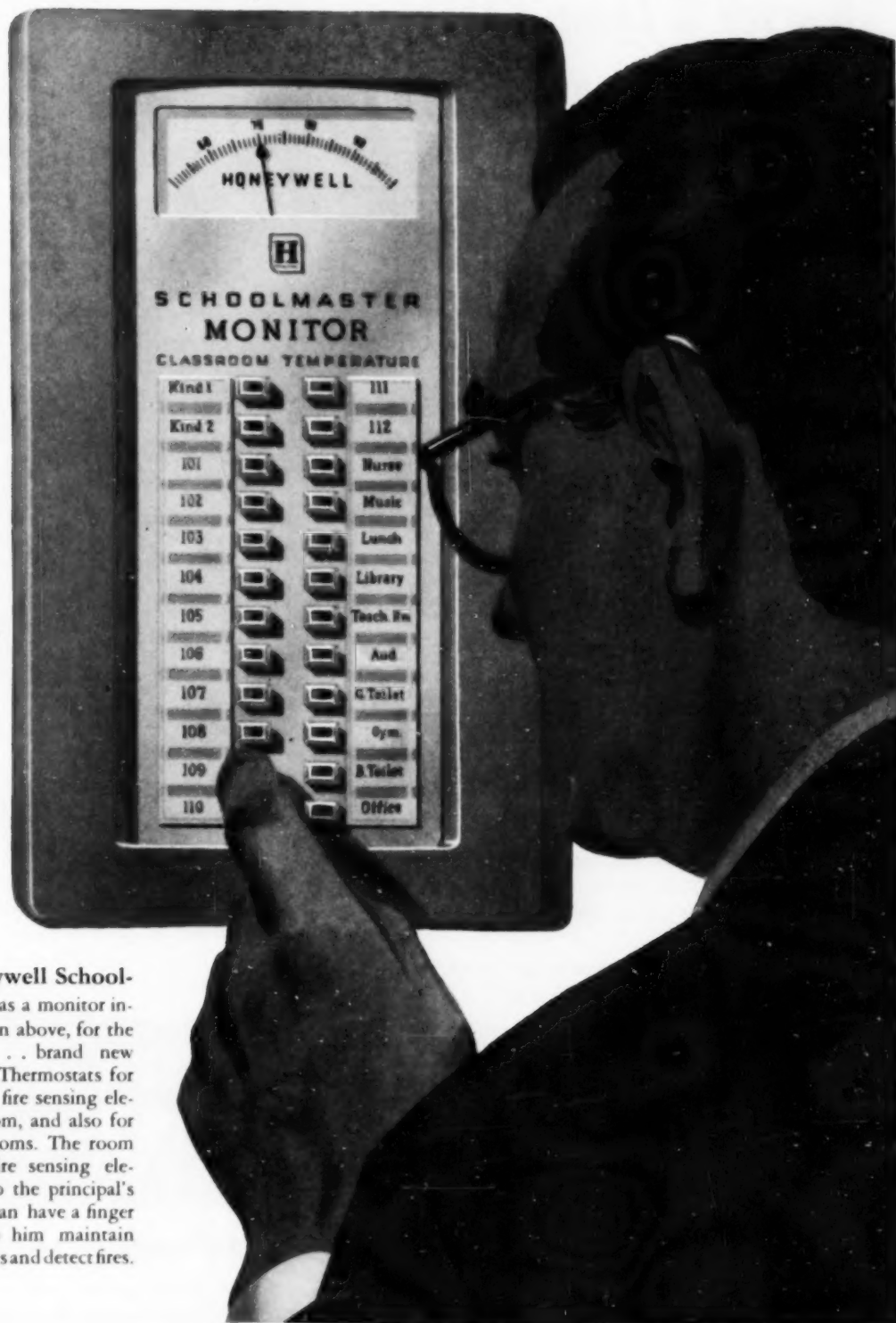


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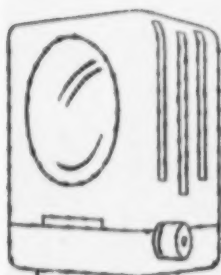
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Decentralized food service facilities were planned, engineered and installed by Southern Equipment Company in the new St. John's Hospital in Springfield, Missouri so that future expansion of the hospital will require only additional food carts and floor kitchens to serve patients — the present facilities for staff personnel and visitors are adequate to handle the expansion. This installation was an award winner in the 1954 Institution's Food Service Contest.

Such careful analysis, planning and engineering together with expert fabrication and precision installation has made Southern Equipment Company the leader in the food service industry. Today hundreds of hospitals, schools, churches, hotels, restaurants and cafeterias all over the country are enjoying the economy and efficiency of "Custom-Built by Southern" installations.

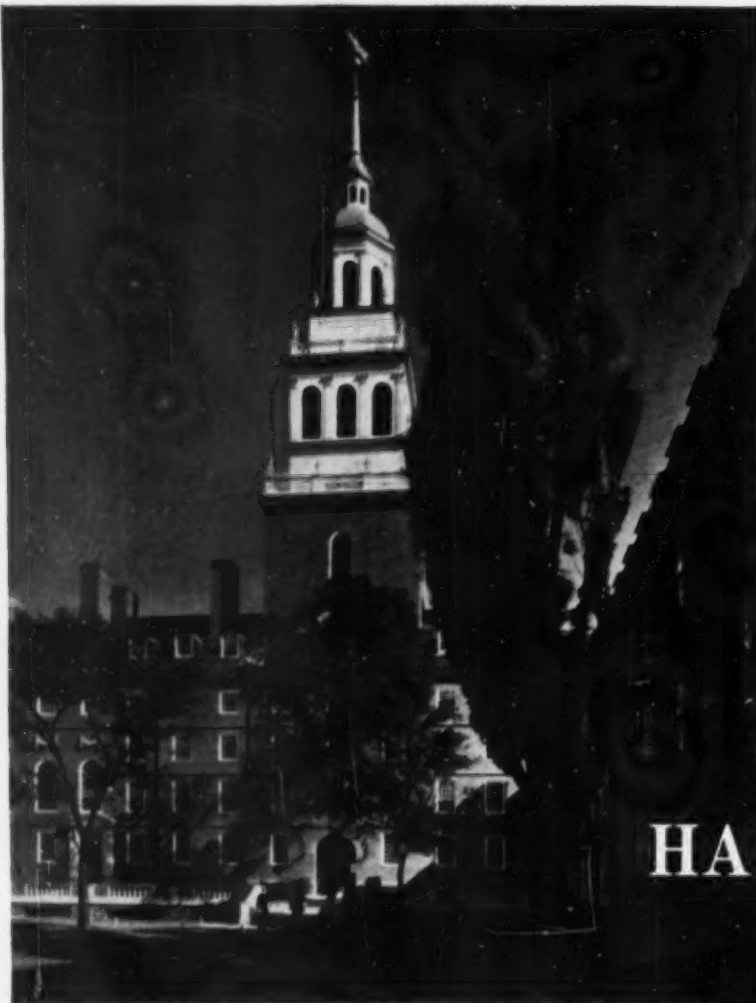
Get expert help with your next kitchen equipment problem or layout — call your "Custom-Built by Southern" dealer, or write Southern Equipment Company, 5017 So. 38th Street, St. Louis 16, Missouri.



Main Kitchen

SOUTHERN

EQUIPMENT COMPANY



Above: LOWELL HOUSE

Architects: for Lowell House, Dunster House, McKinlock Hall, Vanderbilt Hall, Littauer Building, Gordon McKay Laboratory—SHEPLEY, BULFINCH, RICHARDSON & ABBOTT • for Aldrich Hall—PERRY, SHAW, HEPBURN, KEHOE & DEAN and McKIM, MEAD & WHITE, Associate Architects.

Mechanical Engineers: for Lowell House, McKinlock Hall, Vanderbilt Hall—FRENCH & HUBBARD • for Dunster House, Littauer Building—RICHARDSON & GAY • for Aldrich Hall—HAYDEN, HARDING & BUCHANAN • for Gordon McKay Laboratory—R. G. VANDERWEIL.

Heating Contractors: for Lowell House, McKinlock Hall—CLEGHORN CO. • for Dunster House—T. J. MURPHY & CO. • for Vanderbilt Hall—JAS. S. CASSEDY, INC. • for Littauer Building—V. J. KENNEALLY CO. • for Aldrich Hall—THE MERRILL CO., INC. • for Gordon McKay Laboratory—McLEAN-COUSENS & BARTON, INC.

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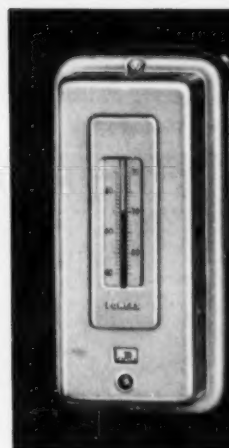
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3



4



- 1 DUNSTER HOUSE, on the Charles River
- 2 MCKINLOCK HALL
- 3 VANDERBILT HALL
- 4 LITTAUER BUILDING



ALDRICH HALL, Harvard Graduate School of Business Administration

One of the 17 unique classrooms shown at left seats 158 students, three others seat 80, and 13 accommodate 102 each. The rooms have been arranged to provide an intimate relationship between instructor and student in the give-and-take discussions by the case method generally used throughout the Harvard School of Business Administration.

Below: GORDON McKAY LABORATORY

Interior photo shows two-story room with important features, a high door and removable intermediate floor to permit varying uses. Research in this laboratory is conducted in mechanical engineering, electronics, electrical engineering and the properties of matter.

POWERS

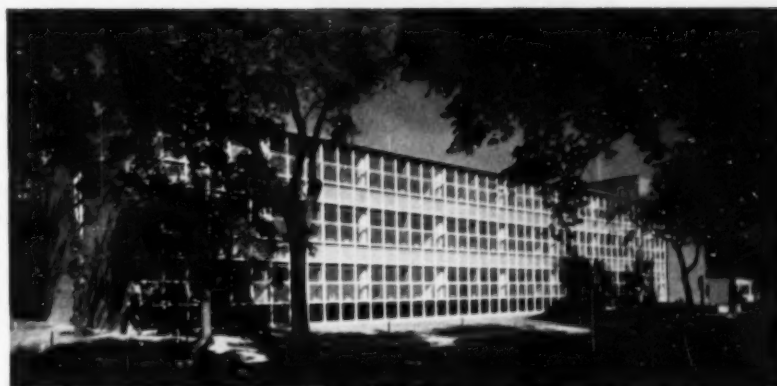
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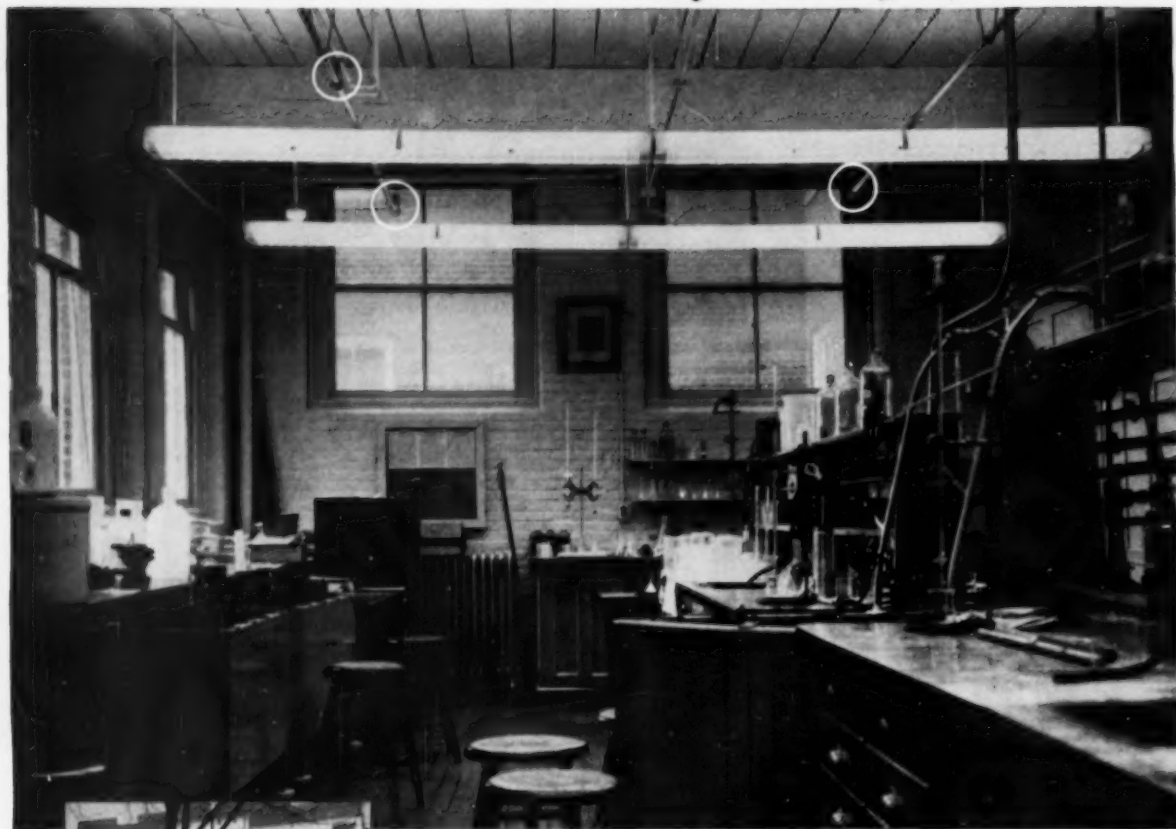


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Is Corporate Giving Answer to Education's Financial Problem?

FRANK HUGH SPARKS

President, Wabash College, Crawfordsville, Ind.



BUSINESS AND BUSINESSMEN ALWAYS HAVE SUPPORTED educational institutions. Almost every small college in the country originally was financed by a businessman or a small group of businessmen. Colleges and universities that are operated on tax money are still primarily supported by business but the tax wall on business profits and on personal earnings has been built so high that free-will offerings by individuals have a hard time getting over this wall. Corporation support of privately financed colleges is an effort to reopen this channel of support by the simple process of gifts by corporate management of corporation funds made directly to the colleges.

The method that has come into wide general use during the past few years is collective solicitation by college presidents of funds from corporations.

The movement has attracted the attention of enlightened corporate management the nation over. Frank W. Abrams, Alfred P. Sloan Jr., Irving Olds, Henning W. Prentis Jr., Walter P. Paepcke, Laird Bell, John L. McCaffrey, Clarence B. Randall, Henry Ford II, Harry A. Bullis, and scores of others have enthusiastically supported it both in speeches and in published articles. These men have supplemented their public utterances with unpublished conferences, formal and informal, one result of which has been the organization of the Council for Financial Aid to Education, headed by Dr. Wilson Compton, who is supported by an able staff available to assist corporations in the working out of plans and programs.

Corporate support of privately financed colleges involves many major decisions. First of all, except for gifts that are made for research projects and other activities directly related to corporate interests, this type of expenditure is a departure from traditional practice and the policy makers of each corporation are compelled to face up squarely to the issues involved as to whether or not this is proper use of corporation funds. If management concludes that participation in this movement is desirable, it has the problem of selecting the institutions to which it will contribute funds. This is where the voluntary association of colleges into state and regional groups is proving to be effective for many corporations.

This movement is not equally attractive to all parts

of the country or to all privately financed colleges and universities. Industry is by no means equally distributed throughout the United States nor are privately financed colleges. The Central States area, in which the movement came into being, is well suited to the successful operation of the plan. Industry in the area is diversified both as to type and size and the small privately financed college occupies an important position in the total educational system. In those parts of the country where there is less industry, where the population is sparse, or where privately financed educational institutions are less numerous, the prospects of success are less bright. Even in those states that are favorably situated, the plan is not equally attractive to all institutions. The larger college or university with an established development program is seldom interested in a cooperative effort. Other colleges find their clientele in groups of special interest, religious and otherwise, so that the time and energy required for this movement is out of proportion to the probable benefits.

To those who have had experience in the program and who are affirmatively disposed toward it, the benefits are of two kinds, direct and indirect.

The direct benefits are financial both in actual money received and the leverage that the money from this source exerts on other sources. In some instances the direct gift benefits have been substantial. Always money collected in this manner is welcome because it interferes in no way with funds from other sources.

The indirect benefits consist of a whole bundle of intangibles. The movement is an excellent public relations vehicle. The privately financed college cause is being spoken of in high places these days by very important people. The close personal contact with the execution of this program required among the presidents of the participating colleges is a great nonmeasurable benefit, while the broadening of acquaintanceship between educators and businessmen the country over is good for both.

The whole undertaking is a long-time venture. Too much should not be expected too easily or too soon but, for a considerable number of institutions, corporate giving is at least an important partial answer to their financial problems.

Looking Forward

They're All on the Team

COLLEGE PLANNERS COULD AVOID SERIOUS AND expensive mistakes in the construction of new buildings by including the operator of the new facility as a member of the planning team.

There have been many cases of new kitchens, dining rooms, residence halls, and college unions being built without the person who must operate them being consulted in the planning stage. Such errors have been particularly flagrant in the design of food service facilities. Many times equipment has not been efficiently located and unnecessary items have been acquired because the food service director was hired after the building had been completed.

The present high cost of construction makes it imperative that mistakes in planning be reduced to an absolute minimum. The operator of a specialized facility can aid in reducing the number of such mistakes and thus can stretch the budget dollar.

Unanswered Questions

THERE IS ENCOURAGING EVIDENCE THAT HIGHER education, at the national level, is beginning to make plans for the tremendous influx of students who will arrive on campus within the next decade. Both the American Council on Education and the Association of Higher Education of the National Education Association, in convention assembled, are devoting their attention and energies to getting answers for perplexing problems.

A check list of such problems and questions include some of the following: (1) How shall particular types of institutions define their functions? (2) How does a state prepare an acceptable statewide program for the future of higher education? (3) What can be done to increase efficiency in use of present facilities? (4) Can adequate numbers of dedicated, well qualified teachers be provided? (5) What are the implications of state and regional coordination in educational planning? (6) Is there an optimum size for specific types of schools? (7) How can methods of instruction be improved? (8) Should the number of students be limited to existing facilities? (9) How should the superior or talented student be handled?

It is obvious, as such a list of questions is reviewed, that one of the first steps in arriving at a partial solution

is to make certain that each institution evaluate its own objectives and function. It must stake out its boundaries in terms of institutional policy and philosophy and then adhere strictly to such a policy. The administration of an institution that attempts to be all things to all people will offer a watered-down program of higher education. This pressure is particularly acute on state supported institutions that are vulnerable to a wide variety of pressures from the taxpayer. The private institution can more easily define its objective and confine its energies to meeting it.

College trustees and administrators must begin now to redefine institutional objectives and re-chart their course if necessary. It is pure folly to attempt such re-charting after the tidal wave of incoming students swamps the campus.

Administrative Perspective

IT IS BECOMING INCREASINGLY APPARENT THAT A college business officer, as well as being a skilled fiscal executive, must be cognizant of public relations. The many ramifications of business office responsibilities are such that the administrator without a public relations concept of his job frequently does his institution a great injustice.

A significant book on this subject recently has been published by Harper & Brothers. "The University and Its Publics" by Clarence A. Schoenfeld concerns itself with encouraging the college executive to obtain a perspective that will aid him in the performance of his job. The book is not a presentation of publicity devices but deals with matters of policy.

As the author states in his preface: "This book is written for all who have something to do with formulating or implementing the policies of a college or university—for presidents, vice presidents, and deans, for directors and administrative assistants, for professors and their students, for trustees and alumni, for all members of the campus family."

College administration is becoming increasingly complex, and broad gauged executive personnel is needed properly to implement objectives. The single-track specialist, as a rule, cannot be the capable administrator that tomorrow's higher education will require. "The University and Its Publics" should be a helpful aid in gaining the institution-wide perspective that is needed.

LEADERS OF BUSINESS AND INDUSTRY have come to accept management consultants as a valuable source of outside management assistance. So much is this true today that thousands of industrial and business concerns now use management consultants for help in the solution of major, difficult or special problems or for assistance in bringing about greater effectiveness and efficiency.

Government agencies, too, have come to look upon management consultants as a valuable source of help for the improvement of their operations. In fact, the use of management consultants has become an accepted practice among a large number of governmental, industrial and business concerns.

There is, however, a notable absence of recognition among the nonprofit institutions, agencies and associations that the services provided by management consultants can be equally beneficial and helpful in the solution of their problems. There are exceptions, of course, but in general the nonprofit groups have been slow to recognize the value of professional management counsel as a method for bringing about improved, modern management practices.

Recently a well known management counseling firm conducted a survey to find out why this should be, particularly when many of these agencies and institutions are experiencing serious difficulty in keeping abreast of their requirements and financing their programs, services and facilities.

Calls were made on hundreds of trustees and executives of nonprofit organizations, such as universities and colleges, medical centers, hospitals and clinics, health and welfare agencies, civic and community agencies, foundations and professional and trade associations. Their answers were very revealing and can be summarized as follows:

1. Many of these individuals were not aware that the services of management consulting firms were available or applicable to the nonprofit type of enterprise.
2. Almost all of the persons contacted were at a loss to know when to use such services and what might be expected in the way of advantages if they did.
3. Some seemed to feel that they could solve their own problems or conduct their own surveys with their own board members or paid staff.



Better Management Practices can be expected in colleges that call on management consultants for aid

ARNOLD EMCH

Management Consultant, Chicago

Regarding the first point, the general feeling expressed was that management consultants were geared primarily to industrial and business problems and that special knowledges, techniques and points of view were required in the management of nonprofit institutions and agencies. It came as a definite surprise to many trustees and executives that a large number of surveys have been conducted for universities

and colleges, medical centers, hospitals and clinics, foundations, museums, health and welfare agencies, civic and governmental organizations, and professional and trade associations.

Regarding the second point, the specific questions that were raised oftener than any others by these trustees and executives were: "How do I know when I need a management consultant?" and "How can a manage-

ment consulting firm be of assistance to a nonprofit enterprise?"

The following paragraphs indicate some of the conditions or circumstances that warrant consideration of the employment of management counsel.

1. *When you are concerned or troubled over the activities or non-activity of your governing board.*

The two extreme examples that sooner or later spell trouble ahead are when, on the one hand, the members of the board are too active in the detailed operations of the institution or when, on the other hand, they show little or no interest at all. Both of these conditions are extremely common to voluntary boards and are symptomatic of top management breakdown.

A governing board has specific and important top management functions, but one of them is not to usurp or undermine the administrative responsibilities or prerogatives of the chief executive officer. Also, the responsibility of a member of the board is not just to lend the prestige of his name or to appear only at the annual meeting but to assume definite and important top management responsibilities throughout the year. The sooner this type of situation is reviewed and corrected, the better the top management will be.

2. *When your governing board or executive committee is too large or too small, or is constituted too loosely, without anyone knowing who is responsible for what, or too tightly, with only a handful doing everything with a sort of self-assumed authority.*

Again, both of these conditions are extremely common to voluntary boards and are sure to bring about ultimate deterioration of top management effectiveness. The fact that these conditions exist is the very reason why outside management counsel should be employed, since these conditions invariably result from subjective or personality requirements and specific interests or lack of interests on the part of board members, as much as from the more impersonal conditions of the community.

3. *When you no longer have a clear idea as to the primary objectives, policies or programs of your enterprise or the extent to which your services or programs should be amended, expanded or contracted.*

This state of mind is not unusual, for few nonprofit groups have made a

concerted effort to clarify their charters or by-laws in terms of contemporary requirements, needs or potentials or in terms of modern management practices. Yet any major management decision, if it is to commit the institution or agency to significant course of action or obligation, should be based on a clear understanding as to its purposes, policies, potentials or even its limitations. As in the case of business, which is continually studying markets, market potentials, consolidated or diversified product lines, production requirements and the future outlook generally, so, too, voluntary agencies and institutions should be devoting much more time to the consideration of the essentials that direct, guide and govern progress and successful future development.

4. *When you find yourself continually blocked in what you think ought to be done but cannot get done for one reason or another.*

Road blocks or bottlenecks of any kind in the initiation or development of a good idea or in the accomplishment of a good program are indicative of a poor management setup and are conducive to delay, lack of progress, discouragement and frustration. The cause of any obstacles to progress or effective working relationships should be located and corrective action taken.

5. *When you are so busy with day-to-day routine as to prevent you from thinking or planning, or spending the necessary time with your key people, or handling top relations both outside and inside your administrative organization.*

This is a sure-fire way to bring about the collapse of your administrative or executive effectiveness, and eventually will mean failure both for yourself and for your institution.

6. *When you no longer have a clear-cut assignment of duties and responsibilities among your personnel, or when there is friction between your people, or poor morale.*

The general tendency is to limp along in the hope that conditions will improve or correct themselves. Rarely does this happen, however, for problems have a tendency to multiply their ill effects, and improvement is the result only of specific, purposeful action designed to correct a situation.

7. *When you have a high rate of personnel turnover and you find it difficult to hold your people even when you want to keep them.*

Such a condition is costly, disruptive and unnecessary, but the sources of the problem must be located and corrective steps taken—and usually the sooner the better.

8. *When your institution or agency cannot do what you or your colleagues think it should do because of lack of funds.*

This is a fundamental top management problem, the solution to which will never be found by accident. A thorough management analysis of your institution's requirements and potential and its financial operations and resources is a matter of top priority in the intelligent planning of any course ahead. The fact is that the successful financing of voluntary institutions and agencies is a direct corollary of deliberate planning and utilization of management counsel.

9. *When you cannot get or give the kind of cost, performance or control figures needed to evaluate, manage or project the operations of your enterprise.*

Any intelligent or practical management decision by a board or the chief executive requires such management information; otherwise you are operating in the dark by guess, hunch or arbitrary opinion, without knowing the consequences of your action. This is costly, unnecessary and hazardous, and management counsel can provide practical, specific methods for these management requirements.

10. *When your key assistants and other personnel complain of overwork, overtime, low salaries, and poor working conditions.*

Here you have a combination of factors, some having to do with your plan of organization, some with work loads and distribution of work, some with procedures, some with personnel administration, and some with physical facilities and equipment. All of these are essential factors in good management and should be subject to periodic review. Management consultants are continually required to solve these management problems and can provide quick, experienced talent specifically geared to these problems.

11. *When your operating costs seem high as compared to those of other comparable institutions or operations.*

There may, of course, be legitimate or explainable reasons for higher costs, but these extenuating circumstances should at least be known and

every effort made to reduce costs to a practicable minimum. Members of boards and executives of voluntary institutions and agencies have a moral as well as a management responsibility to make certain that costs are proper and no more than good management requires. However, comparative statistics are only a rough measure of comparison to highlight possible problems. The solution will require special study of a particular problem in a specific situation.

12. *When your student load in a university or college, or your patient load in a hospital or clinic, or your membership in an association is continually too high or too low or when it fluctuates greatly in relation to the facilities and services provided.*

An unpredictable demand for service or a peak-and-valley type of operation makes planning, budgeting, staffing and general provision of services extremely difficult and sometimes costly, even to the point of running the operation into the red. A primary function of modern management is to plan, budget and control all operations in such a way as to reduce the factor of risk to a minimum. Management consultants can be extremely helpful in bringing about this type of planning, budgeting and control.

13. *When your members, faculty or medical or other professional staff lack understanding or appreciation of the objectives and programs of your institution or agency and become resistive, troublesome or uncooperative.*

Since these groups are invariably fundamental to the programs provided, it is essential that their position and responsibility be fully explored and clarified in the total scheme of things and that effective, modern management practices with regard to professional groups be introduced. Outside management counsel has been extremely successful in bringing about understanding, appreciation and co-operation among professional groups and their effective relationship to the total scheme of things.

14. *When your physical facilities are inadequate or running down through lack of proper maintenance, so you know that there are only a few years ahead before you will need to make drastic changes.*

The common failing here is to wait too long before specific plans are made or actions taken. The lack of funds is no excuse for lack of proper plan-

ning; in fact, specific planning of requirements is the first step toward achievement of the goal, physically and financially. Management consultants can be particularly helpful in this type of planning effort.

15. *When you have difficulty getting or holding adequate executive, professional or technical personnel, such as a chief executive or a business manager or a controller, or the other department heads.*

Voluntary institutions not only are in competition with one another for executive or professional talent but also must face up to the fact that they are in competition for this talent with business and industry as well. Although as a general rule business and industry employs outside management help to procure top executive talent, voluntary institutions and agencies for the most part still rely on their own devices. But as one chairman of a university board remarked: "If we get an outstanding president for the university, half our job is done; if we don't get such an executive, our job is never done." It is not uncommon for board committees, on their own, to search for two or more years for a candidate, when as a matter of fact a better candidate could be found in a much shorter time by outside professional counsel.

16. *When in the case of a hospital you have a number of beds or rooms closed because of a shortage of nurses, student nurses, or nurse's aides.*

In such a situation two facts are paramount for consideration. First, there is no present evidence that the nurse situation will improve in the immediate future, and, second, an unoccupied hospital bed represents an annual loss to a hospital of something like \$7500 in revenue. Outside management counsel has been used by hospitals to solve or improve these situations to the extent of increasing annual revenue for a hospital by a quarter of a million dollars.

17. *Prior to employing architects to design new physical facilities, when you are not sure of total or specific requirements of space, layout, personnel, organization, working relations, special and general services, and equipment.*

One of the commonest practices of voluntary institutions and agencies is to engage the services of an architect for the planning of new facilities without having determined, manage-

ment-wise, what these new facilities are to house or in what relationship the new and expanded organization is to operate. Architects will welcome management counsel, since they cannot proceed intelligently without the answers to these management questions.

18. *When you feel it would be a good idea to have a management audit to check on the whole organization and operation.*

For some years now business and industry have used the so-called management audit as a practical means of reviewing objectives of the entire operation to make certain that all elements are in good shape or, if any areas are in need of improvement, what specifically should be done to bring the operation up to the best possible level of performance. Like a general physical examination, this has been an invaluable device to assure a healthy condition or to point up an area or function requiring attention. Voluntary institutions and agencies have been notably lacking in this kind of healthy interest and curiosity or desire to make sure that all elements of an enterprise are functioning effectively and well.

Regarding the third point raised in the survey of trustees and executives of voluntary agencies and institutions, "Why can't we solve our own problems or conduct our own surveys with our own board members or paid staff?" the answer is: "If you can conduct such a survey economically in time, effort and money, with effective, specific, practical results in a relatively short period of time, then, obviously, there is no reason to employ outside management assistance." But that is an "iffy" statement. And if you do not employ competent outside management counsel, not only do you have no assurance that the job will be done effectively, economically and within a reasonable period of time but also, according to the results of most amateur surveys, the probabilities for success are not very good.

To make a truly valuable survey, the results of which are not only understood but accepted and installed with interest and enthusiasm, requires of the surveyors accurate observation, keenness of analysis, maturity of judgment, sympathy and understanding in human relations, determination, patience, practical outlook, and objectivity. Without these any management survey will suffer.

Why Life Insurance Is Best for Charitable Gifts

DONALD A. BAKER

*Managing Editor, Insurance Salesman
Indianapolis*

IN THE PAST, A LION'S SHARE OF charitable gifts and bequests was made by the very wealthy. Nowadays, however, there is a growing feeling that the man of average income is going to have to assume the load.

Why? For the simple reason that the "millionaire" ranks are rapidly diminishing in the face of high taxes and low income yields from property and investments. Also, the wealthy man is becoming more and more hesitant to lay cash on the line, because he doesn't know how taxes, probate and administration costs, and depreciation will eat into his estate.

DRAWBACKS TO SOME BEQUESTS

Let's consider the three ways of providing charitable gifts, and glance briefly at the first two's shortcomings.

1. *Making gifts during lifetime.* It is almost impossible for the man of average income to put as much money into his favorite institution or charity as he feels he should. Consequently, quite often, rather than give a gift of an amount smaller than he would like to give, he decides to give nothing at all.

2. *Leaving charitable bequests by will.* There are many shortcomings

in this plan, too many to cover completely here. A few of the more important and salient dangers, if the bequest is left by will, should be kept in mind:

Federal and state estate taxes must be paid *first*; that means they must be paid before the estate's creditors or even the family receive any money. This payment must be made in *cash*, no matter what assets must be disposed of to provide it.

Often there is a delay of a year or more before the bequest is paid to the party named in the will.

In many cases, there is a disagreement between the heirs and the institution. This, too, ties up the settlement of the estate for an unknown period of time.

Laws in many states void the bequest if death occurs within a certain time after the gift. Actually, the man is gambling that he will not die for a certain number of years.

Bequests often fail because of improper wording or execution of the will.

The first two methods offer many chances for the bequest plan to fall through. The final result may only slightly resemble the donor's original

aims. Now let's compare the third method with the first two.

3. *Providing bequests by life insurance.* Here are some of the more important advantages of life insurance bequests as compared to living gifts and wills:

Life insurance bequests provide a sizable amount at maturity for a small annual cost during the life of the insured donor.

Life insurance proceeds are paid immediately. There is no delay resulting from settling the estate, legal snarls, and so forth.

Life insurance can be employed right alongside the will. The will doesn't have to be changed to make a bequest through the medium of life insurance.

Policies ordinarily are deposited with the institutions so they can keep an accurate account of them. This virtually eliminates one of the important question marks in other forms of bequests: The donor promises or pledges \$100,000, and then changes his mind to \$50,000.

Cash at once is one of the basic needs of charitable and other institutions, and life insurance gives them cash at once. In addition, life insurance saves taxes, administration expenses, and pays interest due immediately.

Life insurance provides and guarantees enough funds to do what the donor wishes and still does not cut into his general estate.

In case the donor can't keep up the premium payments on the policy or policies, the institution can pay the premiums, if it so desires. In other words, the institution can protect the policy's collateral values, which might be sizable if there were a large number of donors providing bequests by life insurance.

Many persons want to give an annual gift and feel that it is more of a fitting donation. Life insurance satisfies the desire through its annual payment premium plan.

It lets the average wage earner create the bequest out of current earned income instead of capital, an important point to many men and women.

IS "CLEAN FORM" OF GIVING

Sometimes the burden on the institution of maintaining or liquidating the business or property involved in other types of gifts exceeds the value of the bequest. Not so in life insurance. It is a "clean" form of donation.

It gives cash free from any encumbrances.

There are tax advantages when life insurance is used as a form of bequest. Premiums paid on the policy in which the ownership is held solely by the beneficiary charity or institution are deductible for income tax purposes.

The definite form of installment settlement can be used to give the institution payments over a long period of time, rather than payment in one lump sum, if so desired.

Even though the donor of his estate is in financial distress, if the policy has been kept up the financial condition has no bearing whatsoever on the final donation.

If the donor does not want any publicity connected with his contribution, life insurance is ideal.

A life insurance policy is a *legal contract* and, therefore, has many advantages. (1) The gift is not subject to or affected by laws of descent. (2) It is not affected by losses during the insured's lifetime. The policy is completely set aside as going to the named institution. (3) It protects the executor and the estate from contests. (4) The final method, amount and time of distribution are specifically set forth in the life insurance contract, and they will be carried out to the letter. There is no wishy-washy disposition to the institution.

SPREADS PHILANTHROPIC BASE

Most men feel a responsibility to the past. They realize that if it were not for someone who has gone before them and made the way easier they would not have the wonderful opportunities open to them today. There is only one way to repay that debt, and that is to make the way easier for those who will follow along the same path.

Many institutions have been created by philanthropists of the past attempting to pay their debt. Many men and women today know that it is their responsibility to support these charities, but all too often they feel that the relatively small amount they can give is worthless in the over-all picture. But there is a way by which even the person of modest means can give a substantial amount; that way is bequest life insurance. By this plan, a person can make his gifts nearer the ultimate goal he has set and can know that he has done his part in perpetuating the institutions so necessary to our way of life.

FIFTEEN ADVANTAGES IN LIFE INSURANCE BEQUESTS

1. Provides a sizable amount at maturity for small annual cost during donor's lifetime.
2. Pays immediately.
3. Can be employed right alongside the will.
4. Permits college to keep accurate accounting and reduces possibility of donor's changing his bequest.
5. Saves taxes, administration expenses, and pays interest due immediately.
6. Guarantees enough funds to do what donor wishes without cutting into his general estate.
7. Permits institution to pay premiums if donor can't keep them up.
8. Satisfies desire of donor to make an annual gift to college.
9. Lets average wage earner create bequest out of current earned income.
10. Gives college cash free from any encumbrance.
11. Has tax advantages as premiums paid are deductible for income tax purposes.
12. Spreads payments to institution over long period as installment settlement can be used, if so desired.
13. Assures final donation if payments are kept up, even though donor may be in financial distress.
14. Protects donor who wishes no publicity connected with his contribution.
15. Is legal contract; is not affected by laws of descent or by losses suffered by insured; is protected from legal contest, and in end is certain to be carried out to the letter.



The majority of the children of faculty members prefer to spend their college years in a new environment.

Is the son or daughter attending the father's college psychologically or socially handicapped?

TUITION EXCHANGE

**brings needed relief to budget
of faculty and staff members**

FRANCIS P. KING

Teachers Insurance & Annuity Association

A RECENT GRANT BY THE FORD Foundation's Fund for the Advancement of Education to the Tuition Exchange, Inc., Williamstown, Mass., has brought about increased interest in the rôle tuition exchanges can play in helping staff members with one of their important financial problems—the college education of their children. The exchange arrangement provides that local tuition waiver for faculty children be extended on a reciprocal basis to other cooperating colleges and universities.

The grant provides \$38,000 to Williams College as fiscal agent for the first year of operation of Tuition Exchange, formerly known as the Faculty Children's Tuition Exchange. After the first year's operation, the Fund will consider grants in the amount of \$71,000 to cover the period June 1, 1955, through May 31, 1959. At the end of the five-year period it is contemplated that the Tuition Exchange will become self-supporting.

A report prepared for the Fund for the Advancement of Education by Teachers Insurance & Annuity Association (T.I.A.A.) recommended that a foundation grant to Tuition Exchange be made.¹ The objective of the T.I.A.A. study was to seek out ways of increasing the attractiveness of college teaching through helping teachers with the problem of financing the college education of their children. This objective grew out of a recognition that teaching salaries, compared with other professional salaries, are at present relatively unattractive. While no one enters teaching to amass a fortune, satisfactory compensation is necessary to attract able young teach-

ers, especially as college enrollments begin increasing in the next few years.

Though a foundation cannot assume responsibility for a general increase in faculty salaries, it can search for other means of increasing the attractiveness of college teaching. Already there is considerable machinery available to help affect positively the attractiveness of college teaching: tenure rules, sabbatical leaves, retirement provisions, group life insurance, and medical expense insurance. Consequently, the specific purpose of the T.I.A.A. study was to explore the possibilities of adding to this list through helping teachers with the problem of financing their children's college education.

As a preliminary part of the study, interviews with faculty and administrative officers were conducted at 23 colleges and universities. The interviews revealed, *inter alia*, that college staff members are often distressed by the financial difficulty of sending their own children to college. They felt that this was a problem of sufficient overall importance to warrant foundation attention. With this assurance, the T.I.A.A. study proceeded to investigate a number of methods through which a foundation might aid in financing a college education. The study examined the use of group contributory endowment insurance; a plan providing for annual deposits during a number of years preceding a child's college education and later loans to supplement the accumulated funds, with repayment continuing for a number of years after college is finished; a combined fixed-dollar and equity-investment system, and a number of methods involving the individual's own use of various kinds of insurance, savings and investments. The Tuition Ex-

¹King, Francis P.: *Financing the College Education of Faculty Children*. New York: Henry Holt & Co., 1954.

Grants of Tuition Discount and Institution Enrollment in 363 Institutions According to Type of Institution (Full-Time, First Semester 1952-1953 [Hoff Study])

Type of Institution	Number of Responses	Total Enrollment	Number Granting Discount	Per Cent Granting Discount	Enrollment	Per Cent of Enrollment
State Universities	63	384,943	6	9.5	36,197	9.4
State Teachers Colleges	60	57,014	1	1.7	901	1.6
State Liberal Arts Colleges	22	30,387	3	13.6	2,611	8.6
Municipal Universities	9	48,316	3	33.3	8,860	18.3
Private Universities	51	150,049	42	82.4	125,205	83.4
Private Teachers Colleges	6	6,286	1	16.7	557	8.9
Private Colleges, Enrollment 500 and Over	90	81,366	71	78.9	63,711	78.3
Private Colleges, Enrollment Under 500	63	21,009	48	77.4	15,594	74.2
TOTALS	363	779,370	175	48.2	253,636	32.5

change plan, however, was the only one for which a foundation grant was recommended at this time.

Since the plans of the new Tuition Exchange call for a broadened membership, including both public and private institutions, many college administrators will wish to be fully informed as to the philosophy and operation of tuition exchange arrangements. Consequently, the remainder of this article is devoted to a discussion of (1) local waiver of tuition for children of staff members, and (2) extension of this waiver on a reciprocal basis through membership in Tuition Exchange.

The accompanying table illustrates the incidence of tuition discounts for children of staff members in a sample of 363 colleges and universities.² About 80 per cent of the private universities and colleges included in the sample grant tuition discounts, while state supported institutions rarely provide them. Only six out of 63 state universities queried granted discounts. While one-third of the nine municipal universities in the sample made tuition discounts, their enrollment (a rough index to the size of staff covered) was only 18.3 per cent of the total for the nine universities.

Private colleges and universities grant tuition discounts more often than publicly supported colleges do. But, as the sample in the table shows, a remaining 17 per cent of private universities and 22 per cent of private colleges grant no tuition discounts.

The amount of discount varied widely; only 36 per cent of private institutions granting discounts waived tuition 100 per cent. Another 36 per

cent limited their tuition discount to 50 per cent. While there were a few discounts ranging between 50 and 100 per cent of tuition, most of the remaining discounts in private institutions were below 50 per cent.

These figures show that both in the number of institutions granting tuition remission and in the percentage of tuition waived are to be found areas in which measures may still be taken on behalf of staff members who must face the problem of providing a college education for their children.

Provided the student attends the local institution, full tuition waiver affords his parents substantial financial help. This is especially true in the case of private institutions, where tuition is considerably higher than in publicly supported institutions. Hence, a primary method of aid to faculty members can be the making available of a local tuition-free college education. However, local tuition waiver does not solve the problem of the male children of the teacher in a women's college, or the female children of a men's college teacher. Moreover, the T.I.A.A. study reveals that college teachers place a high value on having their children go to college away from home.

EDUCATION AWAY FROM HOME

Providing his child's college education away from the home campus is a major objective of most college staff members. Almost every college teacher interviewed felt that his child's college education ought to be obtained in a new social environment, one that would stimulate independence and self-reliance. Too often, staff members felt, the faculty child attending his father's institution is socially and psychologically handicapped. Some-

times his father's colleagues and his fellow students expect too much of him; his singular position as a faculty child may tend to embarrass him before his student peers; in trying to be objective about him, teachers in the institution may overcompensate to his disadvantage, or they may treat him with undue favor, also to his ultimate disadvantage. Admittedly, some or all of these campus behavior patterns may seem irrational, but they are situations on which faculty attitudes are based.

While the parental objective is simply to encourage and develop the student's independence, it also seems that faculty children themselves want to spend their college years in a new environment. In addition, the home institution may not offer the particular subject matter the student wishes to study and, as mentioned previously,

Providing his child's college education away from the home campus is an objective of most staff members.



²Data obtained from Charles W. Hoff, vice president, University of Omaha, 1952-53 Questionnaire.

men's or women's colleges cannot offer a local education to faculty children of the "opposite sex." Of course, education away from the home campus is bound to require more money from the family purse.

Cooperation among colleges through making tuition waiver reciprocal, thereby satisfying a prominent faculty need at little or no extra cost to the college, is the principle of the Tuition Exchange. Tuition Exchange is the machinery through which the program is administered.

The immediate antecedent of the Tuition Exchange was the Faculty Children's Tuition Exchange (F.C.T.E.), organized seven years ago under the aegis of Dean Robert R. R. Brooks of Williams College. The original membership of four New England colleges had expanded, by January 1954, to 72 colleges and universities (with commitments for more than 900 students), extending throughout the East and Middle West, with a few members in the Far West.

On receiving the Ford grant, the F.C.T.E. took steps to incorporate, choosing the shorter name Tuition Exchange, partly in order to emphasize that each member college could include, if it wished, children of all its employees in its eligibility definitions.

A statement of the F.C.T.E. sets down the three basic ideas on which it was founded: "Although most colleges provide free tuition for children of their own faculty members, girls whose parents teach at men's colleges and boys whose parents teach at women's colleges are not aided by this. Moreover, many parents and children, including those at coeducational institutions, feel that the college experience is more satisfactory if it takes place away from the home town. . . . This [F.C.T.E.] agreement provides a method, at low cost, of reducing the financial worries of faculty members with college-age children."

Tuition costs differ among colleges, of course, but as long as a college grants full tuition waiver to staff members' children, it meets the initial requirement for membership in the Tuition Exchange.

OPERATION OF EXCHANGE

Upon entering the exchange organization each college commits itself to remit, during the succeeding five years, the undergraduate tuition of a stated number of faculty children. Faculty

children may be defined any way the college wishes—the definition may include children of instructional staff, administrative staff, and of all other college employees, if the college so wishes. The commitment should be as closely related as possible to the number of the college's own eligible children likely to go to college in the next five years. The five-year forecast is revised each year. The commitment serves as a guide to the availability of tuition remission at member colleges.

Each college may increase or decrease its commitment at any time it wishes, except that the commitment may not be decreased below the point that will cover debts already incurred. Each college also may limit its tuition remissions in any one year to whatever proportion of its five-year commitment it regards as appropriate. This provision serves to protect each college against a "run" on its resources in any one year. Colleges having an excess of applications for tuition remission in one year are free to select the actual grantees in any way they wish. So that the rejected student may apply elsewhere, rejected applicants for tuition remission must be notified as promptly as possible that the annual quota of the college is complete.

Membership in the Tuition Exchange is open to both public and private institutions of higher education. The definition of the term "tuition" includes fees normally paid by all undergraduates, but does not include special fees, room or board. With respect to admission requirements, each college remains completely free to apply its normal admission standards to any faculty child applying for admission and tuition remission.

The five-year commitment made by each college is in terms of students per four-year undergraduate education. Semester units, however, are used in recording students exchanged so that student withdrawals or transfers do not cancel an entire four-year commitment.

RECORD OF CREDITS, DEBITS

A central record of semester-unit credits and debits is maintained by the director of the Exchange. Entries are made according to the number of semester units required for the completion of the education of each child admitted under the reciprocal program. If a child leaves college before completing his four-year education, the number of semester-unit credits for

the institution he attended is correspondingly reduced. If a faculty child chooses to attend the college in which his father teaches, this is also reported to the Exchange director, and the appropriate number of semester units is entered as both a credit and a debit for that college, thus reducing its net commitment by that number of semesters.

As an example, the child of a professor at member College B applies for admission to member College A, indicating to the director of admissions that he hopes to be admitted tuition-free as a faculty child.

If the applicant is admitted under the Tuition Exchange plan, the liaison officer of admitting College A completes and sends to the Tuition Exchange a standardized journal sheet giving the name of the child, the name of College B from which the child comes, and the number of semesters the child will need to complete the requirements for the bachelor's degree. In the case of transfers or students already advanced at the time a college enters the Exchange, fewer than eight semester units would be credited the admitting college.

On receiving a journal sheet, the secretary of the Exchange posts x semester credits to the ledger of College A and x semester debits to the ledger of College B. The secretary then notifies the liaison officer of College B of this debit.

If College A's annual commitment quota has already been filled, the director of admissions notifies the applicant of this and indicates the terms, if any, upon which the application for admission will be considered. Scholarship aid, for instance, might be available for qualified candidates at institutions whose faculty-child quota for that year had been filled. Most likely, however, the student would apply to another member college of his choice.

Communication between the member college and the Tuition Exchange is maintained by the local Tuition Exchange liaison officer. He notifies the executive director of commitments or changes in commitments, reports credits earned (*i.e.* enrollments of faculty children under the plan), represents the college in Tuition Exchange meetings, counsels local staff members on the use of the Exchange, and interprets for them the Exchange balance sheet, showing how the net commitment and net credit or net debit figures reflect the current availability of tuition.

tion remissions at each college and university on the list.

The executive director of the new Tuition Exchange, Dean Brooks, is responsible to a board of trustees consisting of L. J. Long, president, Wells College, chairman; Prof. Frank H. Lee, Columbia University, and Prof. G. N. Russell Smart, Muhlenberg College. Other trustees are to be elected as the organization grows.

Financial problems connected with the education of faculty children in college are, of course, only one of the economic difficulties individuals in the college world now experience. The T.I.A.A. study showed that continuing problems were the ones that worried teachers most. Three major hazards can result in complete cessation of earned income for the teacher: retirement, earlier death, and disability. These are uncontrollables as far as the teacher himself is concerned.

It is apparent that, of the three, retirement was the most important to the teacher, but it is also the one in which the most effective strides have been made. Somewhat less institutional attention has been given to the staff member who dies while in service, but here again the problem has been reasonably well solved in many institutions and methods of solving it are available.

No satisfactory answer for the college world as a whole has yet been developed in the field of total and permanent disability. Related problems having to do with continuing hazards to family security and stability are also of concern to faculty members—temporary disability, sickness and accident, and the attendant medical, surgical and hospital expenses.

Salary increases and continuing attention to retirement programs, medical expense insurance, and life insurance remain foremost as financial elements in the attractiveness of the teaching profession. Coincident with the improvement of these staff welfare plans can come increased attention to the problem of the college education of faculty children.

RELIEVES FAMILY BUDGET

The work of the Tuition Exchange, as it expands its membership and encourages institutions to provide a full tuition discount for staff members' children, should considerably relieve the family budget problems of those faculty members with children in college or approaching college age.

Giving faculty status to



Residence Hall Directors

BETTE J. SOLDWEDEL

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IN SEVERAL RECENT ISSUES OF PUBLICATIONS dealing with personnel problems, articles have dealt with residence hall management, particularly with those designated as resident directors. I am concerned with the number of articles that have been pessimistic in point of view.

In general, we have been told (1) that probably untrained personnel must be employed because trained people will not be available; (2) that middle-aged married couples constitute the best candidates for either men's or women's halls; (3) that we must create as nearly a homelike atmosphere as possible.

RESIDENCE HALL'S FUNCTION

With continued emphasis being placed upon the housing of students on university campuses, a major consideration facing administrators is "What do we want to achieve in our residence hall program?" Certainly when millions of dollars are allocated for building costs and construction, this question must be answered by staffing a hall with personnel professionally equipped to be identified as "residence hall counselors."

Again, when perhaps 100, 200 or 500 students are united as a body under one roof, the university cannot by-pass the educational opportunities inherent in such a mammoth group-living situation.

What is the function of a residence hall? Many suggest that it is to create as nearly a homelike atmosphere as possible, but it is my opinion that such a response is totally inadequate.

The residence hall, as it has evolved from its simple beginning as a mere

place to provide shelter for students, is today in no direct way similar to a home.

In no typical home does one find 50 to 500 youths within the same chronological age group. In few homes does one find such a large body of young people within the same intellectual areas. In few homes does one find the major interests of its group members directed relatively toward the same goals and objectives.

To liken a residence hall to a home presumably refers to the development within the hall of esprit de corps, whereby each member feels obligated to deal with his or her neighbor as a brother or a sister. When this is the sole premise for identifying residence hall function, the college has fallen short.

It seems unreasonable that a university needs to identify its residence hall program as *like* anything. The residence hall pattern is *not* exactly like anything. *It has a series of component parts that resemble many institutions existing today, but it is a peculiar creation that should be identified by, and developed from, its own innate potentialities.*

The residence hall is like a home, but on many campuses regulations imposed also resemble those found in juvenile detention homes. The residence hall, when established for hundreds of students with little professionally trained personnel provided, also is very much like a hotel operation. Dealing with the appetites of hundreds certainly takes the residence hall away from any resemblance to the home where it is possible to cater to specific dietary favorites and whims.

Each college, then, to cope with the residence hall monsters that are being created on many college campuses, must spend time to answer thoroughly the question, "What is the function of the residence hall?" Some, horrified by the sprawling buildings emerging on university premises, may solve the problem by virtually ignoring its existence.

Others, realizing the extraordinary educational potentialities possible when such a large group of students is housed together, may go to any expense to equip the hall not only with the best physical features possible but with the best trained personnel available as well.

WHO RUNS THE RESIDENCE HALL?

The two types of persons who may be selected to administer a program in the residence hall are the trained and the untrained.

Untrained personnel is found on many campuses at the present time for any one or a combination of the following reasons:

1. The college has overlooked the potential rôle the residence hall may play in the total educational program.

2. The college is unwilling to pay the price for trained personnel.

3. The college feels that Lady A solves the problem because she is (a) an elderly widow "with a little spunk"; (b) she probably will stay until retirement; (c) parents of students will readily accept her since, to the parents, she will seem like their parent.

From the standpoint of trained personnel, *there are trained persons available to operate residence halls. In addition, many more could be encouraged into the field with some clarification and improvement of the hall operations.*

To refer to the first point, an examination of the 1954 issues of the American Personnel and Guidance

Association's placement bulletin illustrates that a relatively small but significant number of trained personnel people applying for various jobs in personnel work leave positions in residence halls. The problem seems to be *not* that we have no trained personnel available but that *we are not keeping those trained people in our residence halls.*

This suggests points for consideration. Why, if the budget is available to pay a trained person, does the college lose him or her after two or three years? The blanket answer might be that there are undesirable features of the job that outweigh the motivations for the residence hall position. A breakdown of such items of irritation is essential if the colleges are to be able to hire and *keep* trained guidance people.

Briefly, the following points may be listed as basic reasons why residence hall personnel become dissatisfied:

1. The person is expected to be on the job continuously. School officials often are guilty of overlooking the multiple late evening knocks on the door "after office hours"; the stomach-aches at 3 o'clock in the morning; the arrivals by late trains on Sunday nights. In addition to tending the door, which means that the resident director herself keeps hours, frequently the school provides no relief coverage by which a hall director may take a week end or even a day off.

2. Often occurring is the jurisdiction over the hall by some administrative official other than the hall director. When this exists, the hall director sometimes is frustrated in attempts to inaugurate and maintain personnel programs because of executive orders issued from the disciplinary rather than the counseling point of view.

3. Frequently residence hall persons are hired on a nonacademic basis,

sometimes as civil service personnel when such provisions are established. This absence of faculty status tends to minimize the strength of the position.

FUTURE OF THE PROGRAM

In summary, then, the college or university must first define its objectives. Is the purpose of a million dollar construction simply to provide shelter for the students? Or is the hall to become an integrated part of the educational program of the university? As it may be presumed that university officials would wish to accept the second suggestion, consideration must be given to the question, "Can the residence hall take an active place in the total university program when the university employs untrained personnel?"

Each year colleges award higher degrees in the fields of psychology, guidance and student personnel administration. Can we not make our residence halls sound enough in operation and interesting enough in scope to attract these persons to them? By a simple awareness of a 24 hour a day, seven day a week operation, schools easily could improve upon present conditions, which find young, trained personnel people seeking different types of personnel positions.

Recognizing that a master's degree in guidance or a related area is essential if good guidance practices are to prevail in halls, the colleges could readily make positions attractive by giving them faculty status. The functions of a faculty member are to teach, to guide, and to lead. Certainly these are the same responsibilities placed upon the residence hall directors. It would be unthinkable for a university to spend millions of dollars on a new classroom building and then to hire ill prepared teachers simply to conserve on the budget.

Student Health

... depends in large measure on proper campus environment. Richard Bond of the University of Minnesota will report in the December issue on the successful campuswide health program in operation there.

WE HAVE HAD AN OUTDOOR ARTIFICIAL ice rink at Phillips Academy, Andover, Mass., for four years and during that time requests have come from schools and colleges inquiring how we make and maintain the ice. The rink, which is 185 feet long and 85 feet wide, is a concrete slab with the freezing pipes embedded in the concrete. Most of the questions asked pertain to the ice surface.

When the temperature drops to about 34°F. at night in the middle of November we begin to make ice. The rink is swept three times to make sure it is perfectly clean. The machinery is turned on during the morning and the rink begins to get very cold about 4 o'clock. We begin putting on a fine spray of cold water, working back and forth until the whole rink is covered, using a shower head nozzle. This operation is repeated every 15 minutes throughout the night and by 6 o'clock the next morning we have ½ inch of good ice base. The secret of a good ice base is to use a fine spray and not to try to hurry the job. Also, the fine spray eliminates all air bubbles in the ice. The same spraying operation is continued the next night, and by 6 o'clock of the third day the rink has an inch of good playing ice. Then it is glazed several times with very hot water, which makes the surface smooth and glassy. We can maintain 1½ inches of ice just by glazing with hot water. We plane the ice only on rare occasions. Planing takes too long, and we could not have the rink in condition by 1 o'clock for the hockey teams.

After the students are through playing for the day, the ice is scraped and then swept before it is glazed. Sweeping rids the ice of that fine film of snow that spoils a good glazing job. When the hot water hits the film of snow it crystallizes the snow, causing a rough surface. The two glazing carts, which are adequate for our rink, we made ourselves. They have rubber tire wheels, a 55 gallon barrel, a spray bar on the back, and toweling that drags on the ice to even the hot water.

For snow removal, we use a Ford tractor with a 6 foot bucket on the front. It takes two men and the tractor 2½ hours to clear 6 inches of snow off the rink. When it rains and then snows, the machinery is run just low enough to hold the ice so that the rain and snow will not cling to the surface. When that condition exists, we remove the wet snow, start up the two

Making and maintaining an

Outdoor Artificial Ice Rink

WALTER E. WINN Jr.

*Superintendent of Buildings and Grounds
Phillips Academy, Andover, Mass.*



Above: Phillips Academy's 55 gallon glazing barrel is being used on the famous school's artificial ice rink. Below: The rink has been half-glazed.



compressors, and start glazing. In a short time we have a good surface. When it has just rained, the machinery is run just low enough to hold the ice, and we start squeegeeing off water so it will not build up on the surface.

Students have missed few days of skating in any season. Ice shows are put on for the benefit of the students and the townspeople, with members of the Boston Skating Club and several world's champions performing.

The Future of the College Presidency

Some serio-comic observations on the head man and his maneuvers

HENRY M. WRISTON

President, Brown University, Providence, R.I.

THE RANGE OF ACTIVITY THAT MAY properly be called the function of a president has become so vast that no one man can discharge all the duties that could reasonably be assigned to the office. He must, therefore, elect to put his energies on such parts as appeal to him in such a way as to evoke his interest and increase his effectiveness; he must delegate to others tasks that they can perform better and more effectively. If he remains long in office, he should from time to time change the zone of his activities in order to restore freshness to the task, to challenge his powers, to keep himself alert, and, above all, to keep from being bored by the essential routines.

ERRORS OF INACTION

Today it is often deemed as almost a trespass upon academic freedom if a president cares or dares to make a suggestion about teaching. It is nonetheless one of his fundamental duties. Of all the necessities for alertness none is greater than to prevent a man's achieving tenure who is less than original, imaginative and energetic in his thought. It is a responsibility that requires more courage than any other presidential task. In an age literally obsessed with security, where the great American Association of University

Professors has put the major part of its energies on tenure and security, rather than upon competence and loyalty to the ideals of the profession, it is difficult indeed for presidents to act. Far greater errors have resulted from timidity, indecision and inaction than from the patently tyrannous misbehavior of a few heads of institutions.

It became somewhat of a joke in the profession that the surest way for a teacher to escape criticism or loss of appointment was by being a radical. Presidents were afraid to touch such men, whatever their shortcomings in the classroom or in research, lest the administration be accused of trying to control opinion. Since the activities of the distinguished senator from Erehwon, it is getting dangerous to criticize a professor who is on the far right flank; if he is for the Bricker amendment he becomes sacrosanct! This tends to narrow very greatly the realm of maneuver; you can deal with impunity only with those who are in the middle of the road. And they present few problems!

HAZARDOUS BUSINESS

Of course, taken literally, this would make nonsense of the office. The presidency is a hazardous business and must be so approached and dealt with. Anyone who wants to move with impunity should seek some other field of endeavor. If he wants security, there is no opportunity for leadership. If he

cannot absorb criticism, he should do something else. No president is ever worth any more than his resignation. If he is afraid to surrender his office, the office is worthless.

But there are hazards in every business, hazards to life and limb in mining, in electricity, and 10,000 other occupations. There is no reason to feel that a college president is in any more difficult position than any other man who has to deal with many publics—the trustees, the faculty, the students, the alumni, and the great *hoi polloi*.

These comments are a further reminder that his office partakes of a political character. It involves the problem of evoking cooperation from people who have no taste for cooperation, who are, almost by the nature of their task, individualists—in research, in teaching methods, and in other ways. There is just as much difference between an educational politician and an educational statesman as there was between Senator Vandenberg uninstructed in international affairs and Vandenberg after he saw the light.

Any intellectual life for a college president is strictly extracurricular. There is no provision for it in the statutes or in the number of his appointments or in the range of his duties. If, therefore, he has an intellectual interest, it is to be regarded as an individual idiosyncrasy, having no necessary relationship to what he does as an officer.

SCHOLAR REQUIRED

It is nonetheless desirable that he should at some time have been a scholar. It may seem absurd even to mention any such qualification in the light of the fact that he will never again have any opportunity to act like a scholar, to think like a scholar, to write like a scholar, or to speak like a scholar. Being a president is a full-time occupation which includes many a dinner and many an evening speech; even leisure is not available for scholarship.

Still it is advantageous to have a scholar for, unless a man has subjected himself to the disciplines of scholarship, unless he has felt the creative urge of a scholar, unless he has schooled himself in the patience necessary to assemble the evidence, he cannot understand the requirements of scholarship. He will never know why a teaching load can be arduous no matter how few hours are spent in the classroom or how small the number of

Abstracted from an address given on Union College Founder's Day at Schenectady, N.Y., February 1954.

students taught. Without that firsthand experience he will never fully understand the professor who works year in and year out on a book, withholding it from publication in order to add one footnote.

But if he ought to have been a scholar, he must nevertheless consciously lay aside some of his scholarly habits. The scholar is justified in postponing decision until the last available piece of evidence has been examined. On the other hand, the administrator who does that will never accomplish even a portion of the things that must be done. On many points he must learn to take the evidence that can be readily assembled and make quick judgments, reserving his time, his energy, and his thought for the basic decisions that are of larger import than the day-to-day management of affairs.

GAP BETWEEN PREXY AND STUDENTS

Since, if American higher education is to prosper, the greatest responsibility of the president is to see that the faculty is composed of scholars, he must have sensitive awareness of what he is seeking. He will insist upon men whose capacity to search out and reveal the truth is uniquely creative, men who will not repeat their lectures year after year or follow in the same groove of instruction time and again. He will find men who can bring to their classrooms and their conferences with students the insights that come from research and discovery, from creativeness, and from meeting the intellectual competition of contemporaries whose training is at least equal to their own.

The president of the future will not be close to the students. We sometimes think that he was in "the old days." From some points of view that is correct. But there was then, is now, and forever will be the gap in age and in station that makes the man "in authority" the subject of awe and fear. Occasionally the relationship has a touch of reverence; more often the awe and fear are compensated for by mockery, raillery and nicknames behind his back.

The other day the father of a freshman said to me that he was sure his son did not understand a word I said in chapel speeches. It relieved me of one fear at least—I had been nervous lest I was putting the cookies on too low a shelf. This reminded me of a sardonic comment by a scholar-teacher I knew long ago. When asked his occupation he replied, obviously with

a certain Biblical passage in his mind, "a pearl caster." It was a gesture of fatigue at the effort—his lifelong effort—to bridge the age gap. It must be attempted; it can never be fully accomplished.

The college president of today must devote a good deal of time and energy to public relations. If the officers of independent institutions are not called upon to lobby, or to engage in political machinations, they must nonetheless spend vast amounts of energy in convincing the public that youth by the fact of its youth is not degenerate. They must persuade a disillusioned age that the ancient mores from which the critics themselves sought to escape until they reached their anecdotal age did not contain the ultimate pattern of sound behavior. They must speak by day and by night, before people, before microphones, before cameras. If possible they should say something, but at least they must speak.

The last observation upon the future of the president's office is that a college president always must seek to give the impression of candor. I state that with great care, for there are times when candor can be frightfully costly. In both institutions I have served, I have had to assemble real estate. If one deals candidly with real estate problems, it is an incredibly costly business; if one does not pursue a somewhat devious path, the road is straight to bankruptcy.

With that sole exception a president must be not only single-minded but do everything in reason to persuade people that he is. It is not easy, for the pressures are tremendous. They account for the old definition of the



function of a dean—to make the college the kind of place the president insists it already is. I recall an earnest plea by a senior professor that faculty members should stop calling the president a liar. "I do not pretend," said the sage, "that what he says is the truth. But a lie requires a conscious deviation from the truth and the president has been saying these things so long that his deviations are wholly unconscious." Presidents, in short, tend to see and believe in "the substance of things hoped for."

Purchasing Library Books

**System at Michigan State
seems to satisfy
all departments involved**

M. R. PIERSON

Assistant Controller
Michigan State College
East Lansing

UNIVERSITY AND COLLEGE LIBRARY people long have contended that their book orders do not fit well into the general routines of institutional purchasing.

There has in fact been some recognition of their special problems, and concessions have been made in some instances by permitting library departments almost complete independence in their book procurement activities. In some schools the library has been serviced through the college bookstore to expedite the job.

At Michigan State the view has prevailed that the principle of centralized purchasing, accounting and auditing of vouchers is sound, and that the disadvantages of direct ordering by any department would outweigh any gains that are the objective of such short cuts. About two years ago we worked out a plan that seems to satisfy all the interested departments. It has operated so satisfactorily for us that we want to pass it along. The advantages are:

1. A substantial saving has been accomplished in the handling of orders in the library itself, as will be apparent from the schedule of distribution of multiple copy forms as shown on the page following.

2. The purchasing department has not been left out of the new arrangement. Instead, it has delegated to the library order department authority to issue the regular college purchase order, which clearly makes the trans-

COMPTROLLER'S COPY		
REFER TO THIS NO. IN ANY CORRESPONDENCE →	L 40293	
MICHIGAN STATE COLLEGE LIBRARY, EAST LANSING, MICH.	N.V.	
JOHN OF THE CROSS, ST. JUAN DE LA CRUZ ST. COMPLETE WORKS, TR. BY E. A. PEERS LONDON, BURNS, 1947, 3 VOLUMES (BEING HELD)		
DEALER	DEPT.	DESTINATION
FORDHAM BOOK CO.	REL.	
RECOMMENDED BY	LIST PRICE	DATE ORDERED
1	22.50	2/25/54
DATE RECEIVED	COST	DATE OF BILL
3/2/54	22.00	2/27/54

Instead of a purchase order number to identify an order, an item number is used for each book title.

action a duly authorized commitment of the institution.

3. The new arrangement provides ample information to the budget department for budget control either by entering encumbrances or by reviewing periodically outstanding orders.

4. All library orders are now handled on an "expedite" basis. This has been especially beneficial to the library in emergency or rush orders, and in taking advantage of information on rare or hard-to-get books and journals.

Now for the details. Our purchase orders for the library are unnumbered to avoid confusion. Instead of a purchase order number to identify an order, we use an item number for each title. The series of item numbers identify the individual title order slips. The title slips are produced from continuous strip forms, nine copies, pinned. The title number, L (for library) 40293, becomes the important numerical identification of a book order instead of the customary purchase order number.

NINE TITLE ORDER SLIPS

The nine title slips are used as follows:

1. Vendor. All of the title slips intended for a single vendor at one time are mailed with the covering purchase order.

2. Library office—author file. For reference by name of author while the order is in process.

3. Record copy. Bound in strips of four title slips, 250 pages, 1000 titles per book. For reference by title number while order is in process.

4. Library of Congress copy. Used in obtaining a set of catalog cards.

5. Process copy. Retained for matching with the catalog cards when they arrive. When it has served its prime purpose, it is forwarded to the department requesting the book as a notification of its arrival.

6. Department copy (while order is in process). Filed according to requesting department. Used to compute periodic balances of departmental allocation of book funds.

7. Controller's copy. The total of the prices of a group of title slips forwarded to the controller is the amount of order encumbrance if encumbrance records are maintained. The item slips are placed in numerical order in an open order file. When invoices are received (identifying the books by numbers as well as titles), the title slips are transferred to a closed order file. The total of the *estimated* cost prices of titles covered by the invoice is the amount of encumbrance liquidation.

8. Not used at present.

9. Placed temporarily in the catalog to indicate that the book is on order. This is the last copy and is of heavier stock to facilitate its use as a temporary file card.

STAFF PLEASED WITH SYSTEM

The use of the continuous strip forms, in multiple copies, did not originate with us. Eight or 10 other universities were using them in one way or another when we adapted them to our use. It is our impression that they were originally designed to be used

independently of the centralized purchasing office.

Our library staff is enthusiastic about the new system. It believes it has effected a labor saving of at least a third in its order filing and recording procedures. Some of us estimate an even higher total saving to the school as a whole.

The voucher audit department finds it much quicker and easier to check the serially numbered items of outstanding orders than to check off titles from long typewritten lists arranged in no special order.

The purchasing department is pleased with the arrangement. Purchasing agents seldom perform a vital part in the routine of ordering library books even when all orders actually are written in the purchasing agent's office. The writing of the orders in the library office now is by delegated authority and the orders carry the signature of the purchasing agent. He still functions in authorizing a commitment, and he now does it under our new arrangement with less work and expense than formerly.

How do the vendors like this method of ordering? We have had no objections. Apparently a chain of item slips in the hands of the order fillers is at least as satisfactory from their standpoint as a page of typewritten titles. Indeed, it may be, in some cases, more convenient for them because of the possibility of separating out titles that are supplied from different stations. In short, we have found many advantages under the new arrangement and no disadvantages.

THERE IS A TWO-PHASE PHILOSOPHY underlying the layout of the buildings now under construction or recently constructed to house and feed men students at Michigan State College. In the first place, living and feeding facilities of large capacity are necessary. In the second place, individual units of relatively small capacity are desirable from the standpoint of control, unit spirit, and the potential for individual expression in the fields of student government, social activities, and athletic endeavors.

To accomplish this double goal the construction at Michigan State College represents great size in the over-all picture and relatively small size in the unit setup. When the project is completed it will consist of six individual living units grouped around a central commons building.

Each of the six living units will be divided into two sections. These individual buildings are four floors high with no basement. Each of the two sections per building will have a resident adviser and hostess. Because each building will house approximately 450 men at normal capacity (two men per room), the proposed arrangement will mean that each adviser and hostess will have a group of 225 men.

LIVING UNIT SETUP

Each building will have a lobby or first floor lounge, a fine arts room, a central switchboard and mail room, and custodian headquarters. On the first floor the students can get from one precinct to the other by walking through the lobby. However, on the second, third and fourth floors the two precincts on each floor will be separated by a locked door, the key for which only the custodian and management personnel will have. This arrangement should greatly reduce through traffic in six out of eight precincts.

Each half of a building, or four precincts, will have a student laundry and pressing room. The laundry room will contain four coin operated, automatic washers, an extractor, and a steam operated, two-drum drier, as well as two sets of regular laundry tubs. The pressing room will be equipped with ironing boards and the irons will be checked out at the mail room office.

Each floor above the first floor will have a large study room for each precinct and a trunk and baggage storage room, too.

With the exception of four corner rooms per building, the student rooms

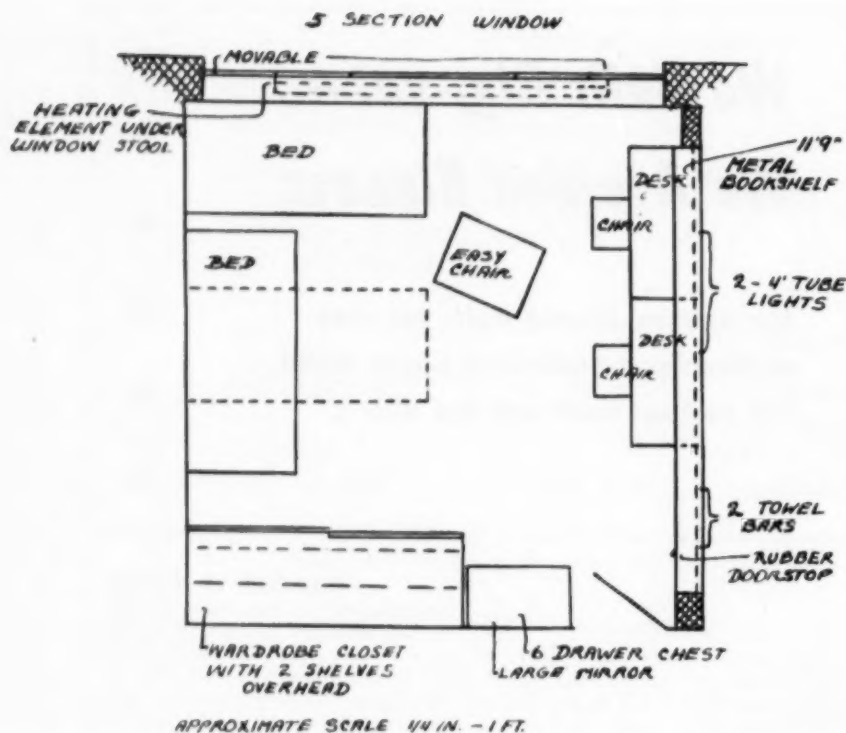
We Built Big, yet— We Avoided Bigness

**Six new residence halls for men
at Michigan State will house 2700,
but section units are for 225**

CHARLES H. CLARK

*Manager, Harrison Road Residence Halls
Michigan State College, East Lansing*





are approximately 14 feet square. The outside wall of each room is virtually all window, the window being almost 12 feet wide. The furnishings in each room will consist of: (1) two single beds with no-sag springs and inner-spring mattresses; (2) one chest of drawers, six drawers high; (3) two desks, 24 inches wide and 48 inches long, with a stack of 24 inch drawers on one side of each desk; (4) two study chairs; (5) one easy chair; (6) a pair of traverse draperies; (7) a bookshelf that runs the full length of one wall over the desks and that incorporates an 8 foot strip light on the underside for desk illumination. Each room will have a large closet of the wardrobe type with sliding doors and two overhead shelves for additional storage. There will be no telephones

Left: Plan showing arrangement of furnishings of the student rooms. Below: Outside wall is virtually all window. Each room is approximately 14 feet square.



in the rooms, but a buzzer system with a return signal will summon students to the precinct phone booths when they get their calls through the building switchboard.

The rooms will have a putty coat plaster finish and will be painted one of five colors. The furniture will be wood with the exception of the study chairs. Metal, plastic and wood study chairs were purchased for the first building to be completed and student choice will determine the type of study chair to be purchased for the other five buildings.

There is a central combination bath, toilet, shower room and washroom for each precinct.

The living buildings contain no eating or recreational facilities. These two facets of student life will be taken

Right: One end of precinct study room in Butterfield Hall, named for Kenyon L. Butterfield, president of Michigan State from 1924 to 1928. Below: Living room.



care of in the central building around which the living units are grouped. This arrangement was made to cut down not only on original installation costs but on long-range operational expenses and to concentrate certain activities for ease of control.

This central structure is a two-story building. The first floor will house management offices, central grill room, TV rooms, lounges, game rooms, check rooms, and laundry pick-up station, plus public restrooms and locker rooms for the food service employees. The second floor will be entirely food service. This area will include a central kitchen, bakeshop, dishroom, employees dining room, food supervisor offices, storeroom and six large dining rooms (each 80 by 50 feet) for students.

The dining rooms are arranged two in line (or end to end) on three sides of the building so that one wall of each room is almost entirely glass. Each dining room will have its own serving line and will service the occupants of an entire living unit. Because these rooms are situated end to end in pairs and because the wall between them is of the folding type, each set of two rooms can be made into one room 160 by 50 feet by simply folding the wall into the recess provided for it. This will make a nice arrangement for

banquets, parties or other social functions that require large space. Because of the steel frame construction of the dining room roof, there will be no columns in all of this area.

Since the six main dining rooms will be serviced from one kitchen and by one dishwashing room, considerable thought was given, during the planning stages, to traffic control. For example, dirty dishes from four of the six dining rooms will be carried to the dishroom by endless belt conveyors. As much of the food as possible, and still consistent with high standards of food service, will be on location when the serving period starts. This is accomplished by heated containers, combination walk-in and reach-in boxes, bulk milk dispensers, and ice cream cabinets on each serving line. There will be a telephone communication service between all serving lines, kitchen, storeroom, and dietitian's offices so that a minimum of time and distance will be used for communication and service.

Because we will be serving approximately 2800 meals in seven different locations from one kitchen in the space of one hour and possibly (under conditions of three men per room) more than 3800 under similar circumstances, we have found it necessary to map out

innovations of equipment design and use not heretofore employed by us. For example, baked items from the kitchen will be done in eight-shelf rotary ovens rather than in the conventional stack or range ovens; salads will be prepared and put together on a custom built, specially designed group of tables resembling, in part, an automotive production line; unless we go to central potato peeling for the campus, a specially designed unit for handling potatoes will be employed that is capable of turning out a ton an hour; the glass washing setup is so designed that after the used glasses are picked up from the dining tables they will not be touched individually again until the customers pick them up at milk and water dispensing stations.

FACTS ABOUT CONSTRUCTION

The buildings have reinforced concrete frames and subfloors and cinder block exterior walls with brick facing. The cinder blocks were fastened together in large sections at the manufacturing point by enclosing these sections in steel frames. When the prefabricated sections arrived on the job they were hoisted into place and welded to the connections provided in the concrete frame. Brick laying started before the block walls were all the way up and the building just seemed to grow right out of the ground.

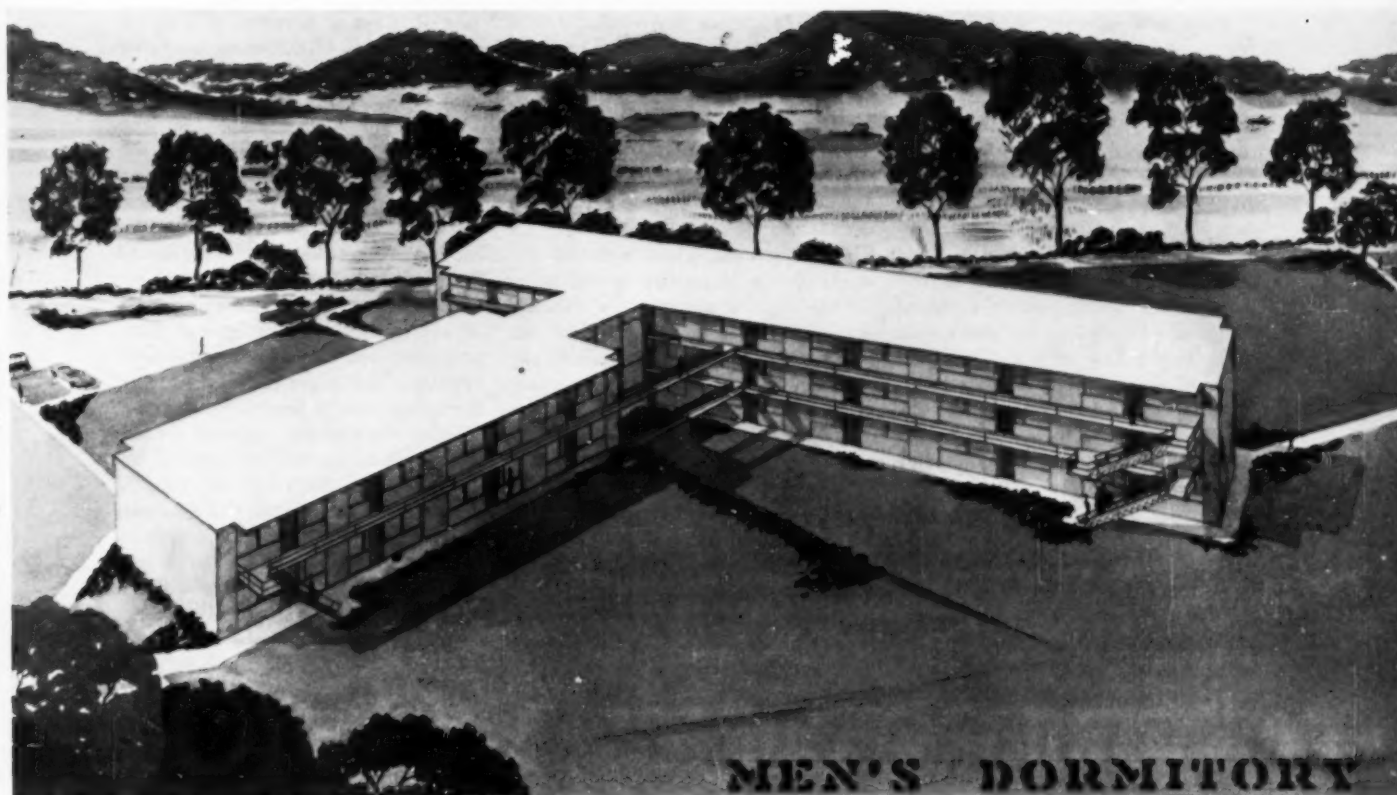
This method of construction is a relatively new idea and was chosen by the architect, Ralph R. Calder of Detroit, because it results not only in a very strong wall but in a much faster method. The interior walls of the living units, with a few exceptions, are metal studs, rock lath, and putty coat finish. Door bucks are hollow frame metal and window sash is cast aluminum. All piping is carried in the walls.

The drapery tracks are set into the ceiling so that they are flush and hidden, and the window stools are quarry tile. The floors of the living units are all asphalt tile and the stairways are molded rubber treads and risers on concrete. The stair wells have exterior walls of glass so that at night they appear as columns of light, and the interior walls are tile or brick, depending upon the location.

The project was financed on a self-liquidating basis. The first four buildings, complete with furnishings and landscaping, cost in the neighborhood of \$7 million. The other three buildings of the project will go under construction as soon as the need is apparent.

Below: Student counselor's room in Butterfield Hall.





At amazingly low cost

Small Colleges, Too, Can Build Adequate Residence Halls

McRAY CLOWARD

Housing Manager, College of Southern Utah, Cedar City

MANY TOLD US THAT IT WOULD BE impossible to build a satisfactory residence hall for 200 men students at a cost of \$250,000. Almost all government loans for college housing far exceed this amount. But students and faculty of the College of Southern Utah were keenly aware of the need for men's housing facilities, and so they set out to do the impossible.

Approximately two years ago a special committee, consisting of both students and faculty, was appointed to act as a new dormitory committee.

Hundreds of hours were spent in bringing together suggestions for a low-cost residence hall. The committee decided that the size, type, general architecture, and construction should be an outgrowth of the school's history. The living habits of our students and the resources of the college community are not the same as those of many other colleges. We gradually came around to the consideration of an apartment type of housing.

Cedar City is in a farming area and students can bring much of their food

and supplies from home. This makes it possible for those with limited funds to attend college. The committee agreed that the students could receive a good part of their education right in the dormitories. Different phases of home living and housekeeping would be taught as part of the educational program. The dormitory would serve as a laboratory and faculty members, the supervisor, and the dean of students would help with classes in cooking, sewing, cleanliness, health, first aid and the art of living together.

There is a cafeteria on the campus for those students who do not wish to do their own cooking.

We sought a government loan of \$250,000 for the project but immediately were told that no other school had even attempted to build a residence hall for so many students at such low cost. It fell upon the committee to prove that it actually could be done without durable materials and comfortable living quarters being sacrificed. Finally, we did get a loan under Public Law 475, and the final stages of planning progressed rapidly.

Following are facts and figures concerning costs, materials, dimensions, rental income, operating expenses, and the general dormitory plan.

FINANCING OF PROJECT

The actual cost was \$216,735, plus \$2600 legal expenses for bonding and \$11,350 for architect's fees. Government field expenses ran \$2600, interest during construction \$5200, and a special reserve contingency of \$2150 was needed for unexpected expenses, making a total of \$238,735, well within the \$250,000 available. The final cost was \$8.36 per square foot.

We have 40 years to pay off the note for \$250,000, with annual payments on the principal and with semi-annual interest payments. The first year's interest would amount to \$7525 and the principal to \$4000, a payment of \$11,525. However, we have agreed

to pay \$15,000 a year until a special reserve of \$23,000 has been built up. The first payment is due in October 1955.

We plan to house 200 men at \$30 each per school quarter, which will amount to \$18,000 per school year. Allowing 10 per cent for vacancy, or \$1800, we should receive \$16,200. A six-week summer school with 200 students in the dormitory would bring \$6000, less 50 per cent for vacancy, leaving \$3000. Each apartment has a power meter and the students pay their own power, so we anticipate collecting approximately \$1000 for this purpose. The total income should amount to about \$20,200.

It is expected that the total operating expenses will be approximately \$5000, broken down as follows: salaries, \$1000; labor, \$300; supplies, \$250; laundry, \$100; utilities, \$1200; maintenance and repairs, \$500; equipment replacement, \$1500, and use and occupancy insurance, \$150. Subtracting this expense of \$5000 from the total expected income of \$20,200, a balance of \$15,200 should be left for servicing bonds. The ratio then of net income to bond servicing would be 1 to 32.

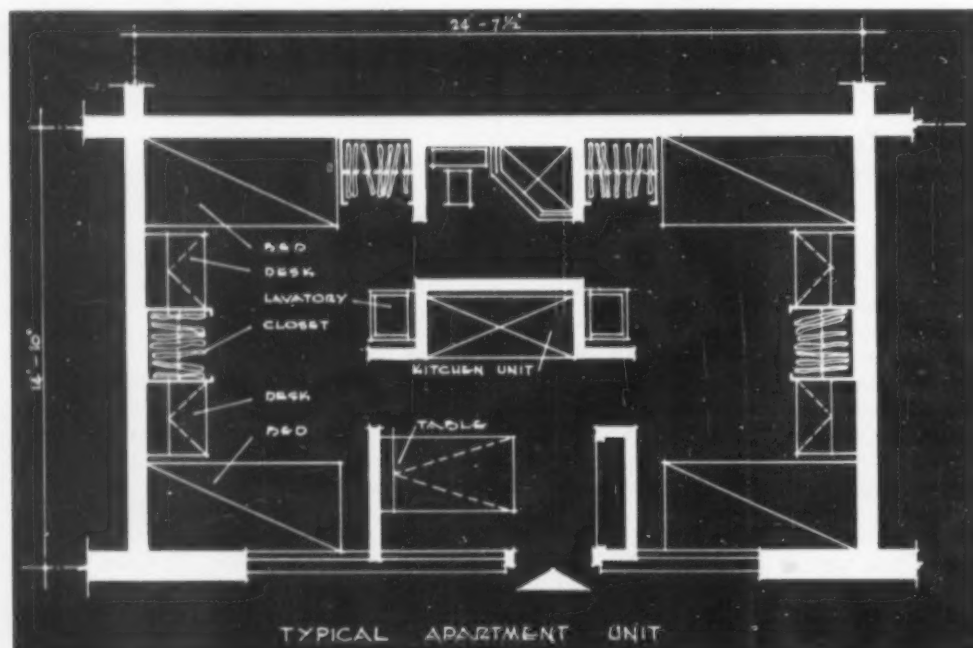
There can be some certainty in regard to the income required because the apartments are so designed that they can be used for small family units. If there are vacant apartments, we can rent them to faculty members or mar-

ried students at a rental of \$40 per month, which is the same that four boys would pay. The housing situation in Cedar City is acute so we feel some assurance that these could be rented. Perhaps we could take the 14 apartments on the smaller wing and rent them to student or faculty families. The only additional expense the married couples would have would be the power charge.

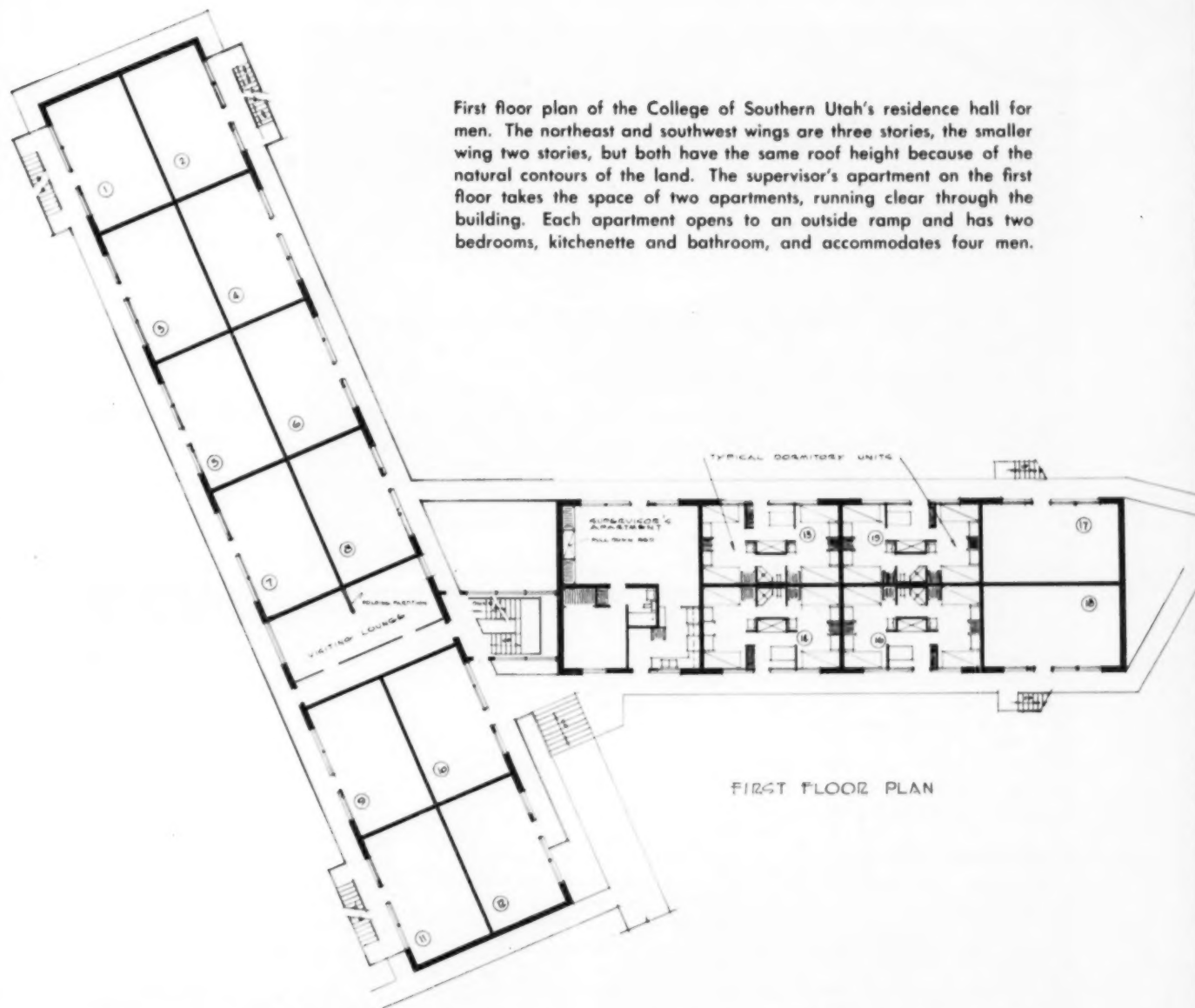
Because of the housekeeping type of apartments, without central halls, restrooms, and so forth, the janitorial expenses and supplies furnished by the college will be kept to a minimum. Most of the necessary supplies needed for housekeeping will be supplied by the students. Students will furnish their own linen so there will be little laundry expense. The cost of repairs and general maintenance will not run exceedingly high, as students will be held responsible for any breakage. The supervisor will be a regular staff member, so most of his salary will be paid from the regular teaching budget. We have allowed \$1000 to be charged to the dormitory for salary.

DIMENSIONS

The over-all footage, including balcony and stairs, is 26,221 square feet, making a cost of \$8.36 per square foot. If the balcony and stairs were figured at one-half area, as is usually done, the cost would still only run \$9.19 per square foot. The length of the



There are 50 of these apartment units, accommodating 200 men, in the new men's residence hall at Cedar City.



First floor plan of the College of Southern Utah's residence hall for men. The northeast and southwest wings are three stories, the smaller wing two stories, but both have the same roof height because of the natural contours of the land. The supervisor's apartment on the first floor takes the space of two apartments, running clear through the building. Each apartment opens to an outside ramp and has two bedrooms, kitchenette and bathroom, and accommodates four men.

wing running northeast and southwest is 166 feet 1 inch and the length of the northwest and southeast wing is 99 feet 10 inches. The width of the building is 30 feet 8 inches, plus a 3 foot balcony.

The northeast and southwest wings consist of three stories, 8 feet 4 inches high, and the other wing will have only two 8 foot 4 inch stories. These wings will have the same roof height because of the natural contours of the land.

MATERIALS

Exterior walls are of brick with floors and ramps of cement. The ramps and overhead cover are of cantilever construction. Interior walls and partitions are cement block, with honed blocks in bathrooms. Floor surfaces are asphalt tile, and ceilings are acoustically treated. The flat roof is covered

with gravel and tar material and has interior drains.

Each apartment opens to the outside ramp and consists of two bedrooms, kitchenette and bathroom. This will accommodate four men, with two sharing each bedroom. The apartments, built back to back, have a common interior wall, which greatly decreases the plumbing cost. Each kitchenette contains a 5 foot unit that includes electric range, refrigerator, sink and cupboards. Each occupant has his own desk and closet. Although bolted to the wall, they can readily be moved to rearrange the apartments for married couples. All these items, including a folding kitchen table, were purchased under the \$250,000 loan. By being attached, they could be considered as part of the general building expense in applying for the loan.

Students furnish their own linen, bedding, utensils and other housekeeping items. About the only additional equipment the college has had to acquire were beds, springs, mattresses and chairs. All but the chairs were purchased from war surplus. We also bought shower curtains and drapery materials for the windows.

In the northeast and southwest wings, there is a game or reading room on the second and third floors. On the ground floor, under these rooms, is a laundry, equipped with washing machines and an electric drier.

The supervisor's apartment, on the ground floor of the smaller wing, takes the space of two apartments, running clear through the building. Under the supervisor's apartment is a storage room with storage lockers for food items the students bring from home.

Fire Prevention Principles . . .

With Interest

as they paid off at the University of Cincinnati

EARL M. DERBES

Service Supervisor, University of Cincinnati

PROBABLY THE HARDEST IDEA TO sell young people of college age is an awareness of their individual responsibilities in the field of group or mass safety. Naturally, such things as smoothly operating fire drills are indispensable, but they don't *prevent* fires! It was with this thought in mind that we began our approach to the problem of our annual participation in Cincinnati's observance of National Fire Prevention Week.

SECRET OF REAL AWARENESS

In previous years, the University of Cincinnati's buildings and grounds department had expressed its cooperation with the Cincinnati Fire Department (in addition to the routine safety measures prescribed) by constructing an elaborate and ornate exhibit that was displayed for the full week in the student recreational center. Possibly as a result of our own experience of an increased awareness of various specific fire hazards, gained entirely as a by-product of our thoughts, efforts and concentration on the problem of creating such an exhibit, the realization gradually dawned on us that the real way to sell "awareness" would be to have as many students as possible engage in the problem of *creating* a fire prevention exhibit!

With this idea as a basis, the ball began to roll rapidly. It was obvious that an exhibit contest between all social groups on the campus would be the proper vehicle. Next came the problem of "incentive" to stimulate the considerable amount of work that would be called for by participation in such a contest; this was adequately

solved by obtaining permission from the dean of administration to use \$100 of our safety appropriation as a prize to the organization erecting the best exhibit on the subject. Also, the chamber of commerce agreed to furnish six engraved trophies, each surmounted by a miniature gold fireman, for first, second and third place awards, plus three honorable mentions.

From this point on the problem became one of mere details: procure outstanding judges; obtain widest possible publicity; reach all prospectively participating organizations; notify and request cooperation of the chamber of commerce and fire department (particularly the fire prevention bureau), and obtain permission from the various deans for an exhibit to be erected in the lobby of their respective buildings.

The contest was officially announced by an illustrated mailing-piece featuring a dummy \$100 bill, which was mailed to all social organizations on campus. The campus newspaper was given the story, from which it ran a headline Page 1 article, plus an editorial. Then for continuity of recruiting effort, a window display featuring the six trophies and dummy \$100 bills, surmounted by a flashing red light, was installed in the student union bookstore. All of this "preliminary" occurred two weeks before the opening of registration of entrants.

Registration was conducted for one week preceding Fire Prevention Week; choice of location was given in sequence of registration. By the end of the week, 20 of our 36 social organizations had registered; three failed to

erect an exhibit, so we entered the contest week with 17 exhibits erected in 12 of the major buildings on campus.

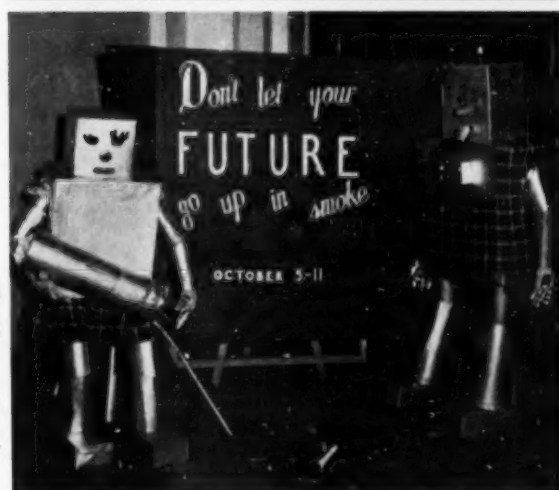
The final problem was to award the prize and trophies under such circumstances as to create the maximum possible desire for participation next year on the part of all possible participants. To accomplish this objective, the award ceremony was arranged as a "between-halves" show at the home football game the last evening of Fire Prevention Week. The university band opened with a specially staged fire engine number, followed by a flaming baton number (electrically lighted batons) with the stadium floodlights turned off. As soon as the floodlights were turned on again, two pieces of fire department equipment raced into the stadium with sirens screaming and lights flashing. As the fire trucks halted near the 50 yard line, the prize winning students dismounted from one while the fire chief, in helmet and white raincoat, dismounted from the other, then made the awards, synchronized with the announcements over the public address system.

NEW CAMPUS TRADITION

As final insurance for maximum participation next year, each participating organization was mailed a "thank you" letter enclosing a photograph of their exhibit.

We are satisfied that a new campus tradition has been started, and that succeeding years will see an ever increasing observance and awareness of "fire prevention" on the part of our entire student body.

Some Student
Entries in the
Fire Prevention
Exhibit Contest
Held During Fire
Prevention Week



BOILER EFFICIENCY

means more money for teaching

LESTER S. RIES

Superintendent of Buildings and Grounds, Oberlin College, Oberlin, Ohio

AS A COLLEGE EXPANDS OVER MANY years, it usually adds new buildings to old, often with continuing dependence on the older utilities. Reluctance to replace these utilities, particularly heating plants, results in increasing operating costs from the obsolescent plant until a decision must be made. Adding boiler capacity to supply the steam demands of the larger institution does not solve the problem of mounting fuel bills.

This was the situation faced by Oberlin College in 1949. Founded in 1833, the number of college buildings connected to the heating plant grew from 19 buildings in 1939 to 24 in 1949. Future growth, as evidenced by today's 31 buildings, had to be considered. The choice in 1949 was between adding another boiler to the existing three installed in 1913 or scrapping the old plant and installing a new one with the necessary capacity.

After four years of operation, the decision of the trustees to invest in

an entirely new boiler plant has been well justified. Aside from the relative inefficiency of the old boilers, the steam requirements necessitated burning expensive high fusion coal and the boilers were being pushed beyond capacity. Steam that had cost 65 cents per thousand pounds in 1939 had risen in cost, with the aid of inflation, to about \$1.08 per thousand in 1949. In 1952 the cost of steam from the new boiler plant had dropped to about 84 cents in terms of that year's dollar and to 40 cents based on 1939 fuel and other cost items.

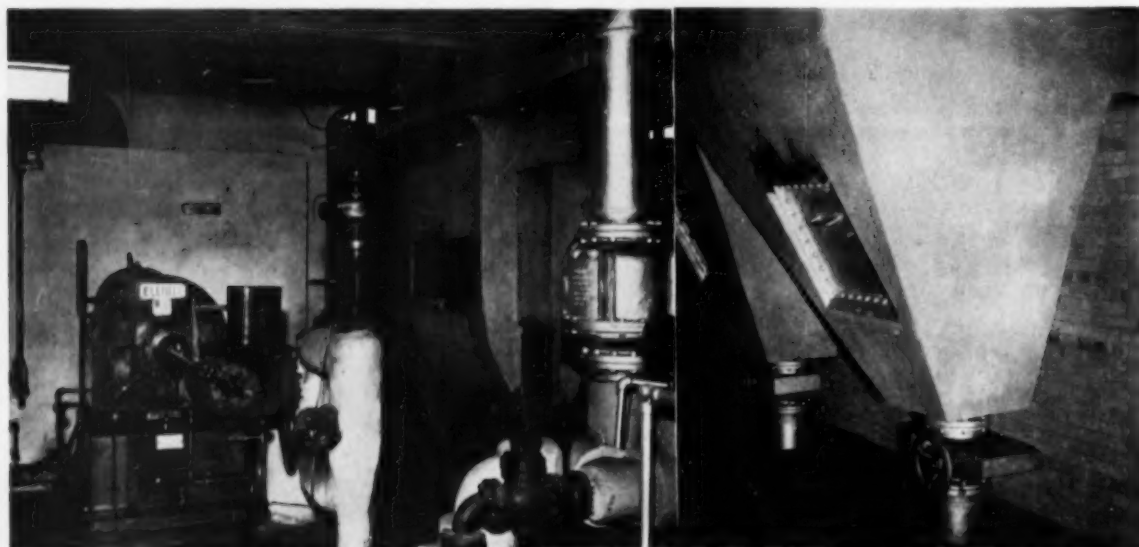
The advantages of a modern boiler plant over one of 1913 vintage were obvious enough, but to show the greatest possible return on the investment every aspect of economical steam production and transmission was taken into consideration. Not the least of these factors was insulation.

The old boiler plant, and particularly the steam piping, had little insulation. What it did have was mostly

of the corrugated paper type. With the aid of capable consulting engineers and a highly skilled insulation contractor, the new plant insulation not only helps to produce steam economically but uses that production effectively and with a minimum of heat loss from equipment and piping.

Any slightly higher first costs of the insulating material were infinitesimal in relation to the over-all cost of the new boiler plant. Annual costs based on the heat savings and the amortized cost of the insulation were of much greater significance. The economy of using 85 per cent magnesia insulation called for in the specification was obvious enough when calculated on this basis.

In the new boiler plant, the following equipment was insulated: exposed ends of boiler drums; deaerating feed-water heater and storage tank; domestic hot water storage tank and steam heater; boiler breeching and sifting hoppers; fan housings, ducts and tur-



Left: Steam turbine drives induced draft fan. Turbine casing, fan and ductwork were insulated. Right: Operat-

ing at about 700, these sifting hoppers were insulated with diatomaceous silica, beveled off around access doors.

bine casings. In addition, all high pressure and exhaust steam piping, as well as feedwater and trap discharge lines, were also insulated.

After the equipment was cleaned and made watertight, 2 inch thick blocks of 85 per cent magnesia were secured to the weld clips on boiler drums with 14 gauge annealed iron wire. Hexagonal wire mesh was then stretched taut over the insulation and laced to the wire. The wire mesh helps to support the magnesia blocks and also provides a base for $\frac{1}{4}$ inch coats of asbestos insulating and asbestos hard finish cement.

The exposed surfaces of the de-aerating feedwater heater, vent condenser, and the domestic hot water tank were insulated with $1\frac{1}{2}$ inch thick blocks of the same material, secured in place with steel cables. Asbestos insulating and asbestos hard finish cement were applied over the block and an 8 ounce canvas jacket was pasted and sewed on as a final finish.

The boiler breeching, sifting hoppers, and induced draft fan housing and ducts generally operate at a temperature of some 700°F. One inch v-rib metal lath was fastened to stiffener angles on breeching and ducts with 14 gauge annealed iron wire to provide a level base for the insulation. To this lath, 2 inch thick blocks of diatomaceous silica were applied, closely butted and pointed up with asbestos insulating cement. In the case of induced draft fan housings, the blocks

were attached to welded-on studs. The turbine castings for both induced and forced draft fans, as well as boiler feed and vacuum pumps, were insulated with $1\frac{1}{2}$ inch thick blocks. In all cases, finishing materials — wire mesh, asbestos insulating, and asbestos hard finish cement—were applied as previously described.

High pressure steam mains were insulated with either $1\frac{1}{2}$ inch or 2 inch thick sectional 85 per cent magnesia, depending on pipe diameter. Nominal 1 inch thick insulation was applied to other pipe lines, such as exhaust steam, feedwater, and trap discharge. When bends were encountered, the insulation was scored and shaped to fit, wired on, then given a thin coat of asbestos insulating cement to present a smooth, even surface. Piping was wrapped with 40 lb. resin-sized paper, and finished with a sewed jacket of 8 ounce canvas.

DIFFERENCE IN INSULATION

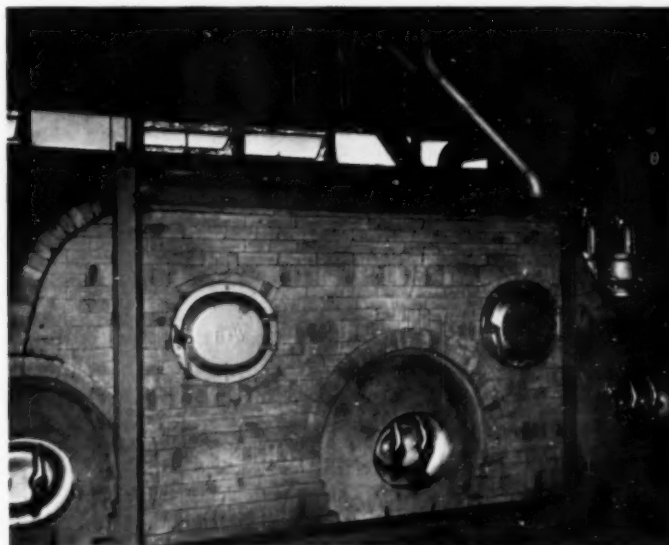
All 4 inch and larger flanges, valves and fittings were insulated with block insulation that was $\frac{1}{2}$ inch thinner than the insulation on the adjacent piping. Insulating cement was then applied to make up the $\frac{1}{2}$ inch difference. On smaller flanges, valves and fittings, where the use of block insulation was impractical, only insulating cement was applied.

The pipe insulation near all flanged fittings was cut back and tapered off. This permits ready access to flange bolts during maintenance without danger of damage to the insulation.

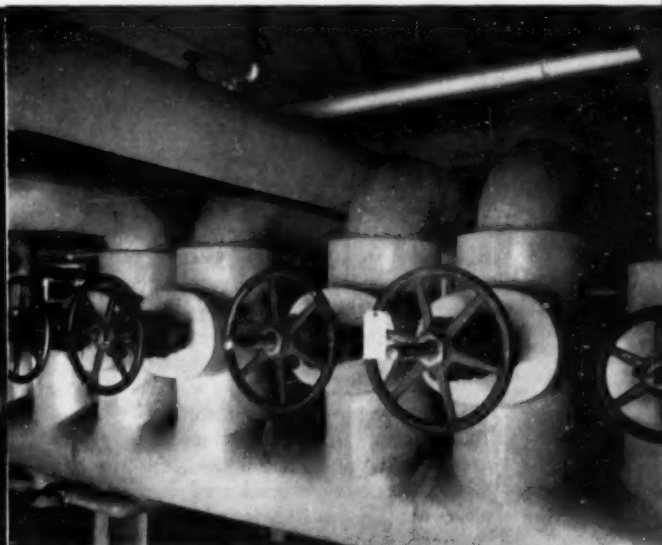
The first three years of operation have proved that the new plant is far superior to the old one. Whereas the heat load of the college has been rising right along from 97,556 sq. ft. EDR (equivalent direct radiation, steam) in 1939 to 124,381 sq. ft. EDR in 1949, and to more than 170,000 sq. ft. EDR in 1952, the unit cost of producing this heat rose only as long as the old plant was being used. It dropped drastically the moment the new plant was lighted off. In fact, in terms of the 1939 dollar, this modern boiler plant is now producing the steam for much less than the old plant.

Several factors have contributed to this higher operating economy. First of all, larger boilers of improved design have been installed. The two new four-drum boilers each are rated at 612 b.h.p., whereas the old boilers combined rated only 900 b.h.p. Second, the new boilers operate at a higher pressure (125 psig) and temperature (350°F.), which is known to permit better efficiency. Last, and by no means least, the insulation needs of the boilers and auxiliaries, as well as of steam and condensate piping, were as carefully engineered as all other aspects of plant construction.

The old plant had very little insulation; the insulation materials and thickness applied in the new plant were chosen to give the highest return on the investment. This capital expenditure makes it possible to devote more of the operating budget to the educational functions of the college.



Left: Note magnesia insulation applied to ends of boiler drums and, to prevent damage, beveled off around man-



holes. Right: Two-inch thick 85 per cent magnesia was applied to high pressure steam mains and associated valves.

What's in a Name?



**Lest a college tangle with
a commercial organization,
it is well to have policies
worked out in advance**

T. E. BLACKWELL

Vice Chancellor and Treasurer, Washington University, St. Louis

IN 1946 A FORMULA FOR A HIGHLY nutritious bread was developed at the College of Agriculture of Cornell University by Dr. Clive McCay and associates. This formula was first used in producing bread for certain hospitals and mental institutions maintained by the state of New York. Later, the formula was published in various journals and magazines for the benefit of the general public. Gradually, bread produced with the use of this formula began to be used extensively throughout the state. Several commercial baking companies evinced interest in producing bread under the formula.

The Messing Bakeries, Inc., of Brooklyn, N.Y., opened negotiations with the officials of Cornell University in an endeavor to develop mutually acceptable methods and standards of advertising bread produced according to the Cornell formula. Before these negotiations were concluded, the bakery concern applied for and was granted a registration of the name "Cornell Bread" and "Cornell Loaf" as a trade-mark in New York State.

It began at once to advertise and sell bread with the name "Cornell" in white letters on a red pennant on the bread wrapper. Later, a red scroll was added, apparently to convey the impression that the product was sponsored by Cornell University.

To protect its own name from unauthorized usage, the university brought an action in the supreme court of New York to obtain a revocation of the trade-marks "Cornell Bread" and "Cornell Loaf" and to enjoin the Messing Bakeries, Inc., from making use of them. The university, in its petition to

the court, stated that, as a necessary result of its activities in the field of agriculture and home economics, it had itself produced and sold a large quantity of food products to the general public under its own name. The volume of such sales is now approximately half a million dollars annually.

Consequently, the university felt justified in seeking to restrain the use of its name on the grounds of unfair competition. The court, in its opinion¹ dated July 31, 1954, written by Justice Newman, held that Cornell University was entitled to judgment, canceling the registration of the trade name of the defendant and restraining the defendant from using the word "Cornell" in such a manner as to mislead the general public.

The court ruled that it was not necessary for the university to establish the fact that it is in direct competition with the defendant in order to be entitled to equitable relief on the grounds of unfair competition.² It is merely necessary to show that the public may have been misled. The courts will not interfere where the only confusion in the mind of the public results from similarity of name.³

The following is from Justice Newman's opinion:

"The manner of use is the objectionable feature in this case. The entire

makeup of defendant's bread wrappers and advertising is such as to present to the public the idea of Cornell University. The use of the name 'Cornell' in white letters on a red pennant, and later on a red scroll, is so designed as necessarily to impress upon the mind of the casual observer the idea of Cornell University. When one considers the vast number of people who are undoubtedly acquainted with Cornell and its reputation, either by having attended some of its colleges as a student or by having come in close contact with the university, the value of this type of advertising is apparent.

In the decree of the court, entered on Aug. 20, 1954, it was stated that "... nothing herein contained shall be deemed to prevent the defendant, in connection with the production, marketing and sale of bread produced in accordance with the high nutrition formula developed at the plaintiff's College of Agriculture, from employing or using on its wrappers, advertising and other promotional material, the words 'Cornell Formula Bread' subject to the following terms and conditions:

"1. That such words shall be aligned together, and not separated, and shall appear in equal size, black, block lettering, not more than 1/2 inch in height, and unaccompanied by any simulated pennant, scroll, banner, flag, or similar device, as background or otherwise;

"2. That such words shall be subordinated to the defendant's trade-name or mark, which shall appear in lettering not less than twice the size of the lettering of such words on any wrapper, advertising or other promotional material, and constitute the dominant feature thereof;

"3. That such words shall be accompanied by a statement of the aforesaid formula and a further statement reading as follows: 'This bread is made in accordance with the high nutrition formula developed, solely as a public service, at Cornell University. Cornell University has no responsibility for, connection with, or interest in this product or this company.'"

Many colleges and universities have found it desirable to develop policies and procedures to handle the requests received from time to time from commercial organizations. Such policies and procedures should be reviewed periodically by a committee of the governing board in consultation with legal counsel.

¹Cornell University v. Messing Bakeries, Inc., supreme court of New York, Aug. 20, 1954.

²Long's Hat Stores v. Long's Clothes, 224 A.D., 497; Philadelphia Storage Battery Co. v. Morris Mindlin, 163 Misc., 52; New York World's Fair v. World's Fair News, 163 Misc., 661.

³Corning Glass Works v. Corning Cut Glass Co., 197 N.Y. 173.

THE INCREASING SIZE AND COMPLEXITY of all universities and colleges on the North American continent in the last 20 years has resulted in a large increase in the numbers and responsibilities of the secretarial, clerical and stenographic staffs. The result of this increase has been an extra problem in recruitment, selection and classification, and pay policy. In addition, because of the normal decentralization of university departments and faculties, all universities have peculiar problems of administration.

At the University of British Columbia, the problem was particularly acute because during the postwar years of 1945-48 the enrollment had increased from about 2000 students to 9500. The needs of these years were so exceedingly great and pressing in so many ways that there had been no time to formulate a specific policy with regard to recruitment and classification of clerical personnel. Accordingly, in 1948 the director of personnel was given the task of rearranging and reorganizing the situation as it concerned these groups.

NO UNIFORMITY

An initial survey disclosed that generally things had become confused and disjointed during the period of expansion. Stenographers in one department were found to be making twice as much money as stenographers doing similar work in another department. Clerical workers in one faculty were found to be working longer hours and getting less pay than clerical workers in another department. Salary increases in some departments had been fairly regular and consistent; in other departments increases had been confused or nonexistent. Promotion and transfer had become next to impossible because of the lack of homogeneity of duties and salaries between one department and another. Some departments had been unionized or were in process of becoming so; other departments had no members in the union. Although the majority of employees were efficient and responsible, some few were doing little and being paid highly for it.

In the reorganization, which started immediately after the survey had been completed and considered, the following were set down as guiding principles:

1. Some policy should be instituted that would create a greater degree of similarity between pay for duties in one department or faculty and another.

Everyone's better satisfied

under the

University of British Columbia's

New Personnel Program

J. F. McLEAN

Director of Personnel Services
University of British Columbia, Vancouver

2. Some regular system of pay for merit and service increases should be adopted.

3. An increased opportunity for promotion and transfer should be provided.

4. Some more suitable method of initial selection should be discovered and adopted.

5. An effort should be made to obtain the optimum of flexibility in any new over-all organization.

At the outset it was recognized that all of these aims could not be accomplished immediately and that the total might take three or four years. As a first step, a committee of classification was set up with representatives from each of four larger departments. Each of these committee members had some qualification or experience in organization.

JOBS CLASSIFIED

Following the setting up of the committee, "job classification" was instituted. In the first instance, each individual and department head on the campus was sent a letter explaining the situation and what was being attempted. Together with the letter was enclosed a job questionnaire that attempted to ask those questions most pertinent to the task in hand. On return of the questionnaire each individual and department head was interviewed by two members of the committee together. At these interviews the answers to the questionnaire were completed in greater detail and analyzed on the spot.

On consideration of the total picture, the committee found that the secretari-

al and clerical groups fell roughly into five main categories: (a) Junior Clerk—Junior Stenographer: routine, direct supervision; (b) Clerk I—Stenographer I: semiroutine jobs, a little independence, and some experience; (c) Clerk II—Stenographer II: independent jobs, considerable experience, nominal supervision; (d) Clerk III—Secretary-Stenographer: independent jobs with considerable responsibility, little supervision; (e) Clerk IV—Secretary: completely responsible for certain type of work, usually has supervisory duties.

CHECKED BY FACTOR ANALYSIS

Placing each job in one of these five groups was done at first on a rank evaluation method but was further checked by a factor analysis based on the following points: (a) education and experience required; (b) responsibility; (c) special job conditions; (d) special skills; (e) effort required.

A job description for each of the groups was then prepared and each job was assessed to see how it fitted into the general pattern.

During this time of discussion and analysis no consideration was given to the existing pay of each of the persons occupying the position and no attention was paid to the particular merits of the employee concerned. As in all job classifications, the actual job itself without regard to the incumbent was considered the basis of the total plan.

Now that jobs had been analyzed, descriptions prepared, and groupings made, a pay plan was evolved. The application of this pay plan had to take

into consideration a number of important factors: (a) existing pay rates; (b) the egos of various department heads; (c) the amount of extra money available.

As all changes in pay had been frozen for a matter of five or six months and as the plan was timed to come into effect at the normal change of pay date, the end of the fiscal year, most of these problems were worked out with a minimum of difficulty. In general, action was founded on the following principles:

1. Overlapping of duties and responsibilities between groups was taken care of by overlapping in pay scales.

2. No decreases except in very special circumstances were recommended.

3. Annual service increments were budgeted for but could be made only on the recommendation of the department head concerned.

4. A system of bi-yearly reviews of classification on request was arranged. Request could come from the incumbent or from the department head.

5. Arrangements were made to post all vacancies as they occurred.

6. A selection procedure involving use of clerical aptitude tests was adopted.

The total plan has been in operation some five years now and is generally accepted and approved. The staff now finds that on the whole one department is treated the same as another. Those persons who have wished changes from one department to another have found such change relatively easy to accomplish. The number of transfer applications has been astonishingly small. Department heads have, by retaining the right to recommend yearly increases, kept desired control over the individual. Because possible increases could be foreseen as much as 12 months in advance, the finance department was able to budget well ahead.

Although it had been feared that this implementation of the plan would be costly, experience has shown that the total cost, if anything, is less than the previous policy of hit-and-miss and that the employees generally are much more satisfied. A similar plan now has gone into effect for the technical groups. Time will show if it meets with equal success.

but aloud I spoke graciously as follows: "Yes, of course, Mr. Blank. We'll fix you up with something most attractive. I rather think, though, that it will need to be a buffet dinner."

"As you will," my visitor replied, his hand already on the doorknob. "I'm dumping it all in your lap. I don't even want to see a menu."

On the theory that the curiosity of others might be greater than his and their faith less strong, I shall give you the menu we prepared and served:

Tomato Juice Cocktail
Hors d'Oeuvres
Standing Rib of Beef (135 lbs. of it; none left) *au jus*
Yorkshire Pudding (crisp, lovely brown)
Broccoli With Hollandaise
Parker House Rolls
Currant Jelly
Whole Peeled Tomatoes
Water Cress With
Roquefort Dressing
Fresh Strawberry
Refrigerated Pie
Coffee
Mints

The tomatoes were personally selected for uniformity and quality.

The beef was perfectly roasted by one of our better chefs. It was carved in situ at the buffet table, one of our dietitians alternating with a chef at this momentous task. Being one of the guests, I sat at a near-by table savouring the results of our whirlwind efforts.

We had placed the buffet table in a dining room adjoining a courtyard. The tomato juice cocktail was in a punchbowl, and giving a certain symmetry to the table was another great bowl, gay with crushed ice and parslied lemon slices, from which each guest could help himself to a small kosher green tomato impaled between shrimp. This combination tasted as luscious as it looked.

We were able to commandeer high school girls to serve the coffee. They scurried about from table to table with their redolent pitchers, filling and refilling the cups; the intake rate of these guests was prodigious—a total of 9 pounds of ground coffee. Apparently the current home policy was one of rigid self-limitation.

It was a pleasant party, and for me the pay-off came when the guest of honor, in bidding me a courteous good-night, said: "This dinner will be one of the brighter memories of my life as a college president."

Buffet—Tasty if Hasty

ANNE W. SCHUMACHER

Director of Food Service

Baldwin-Wallace College, Berea, Ohio

OUR CAMPUS WAS PLAYING HOST TO a summer conference, and it was a struggle to get enough dining room help to give prompt service to the delegates. In the town of Berea, 12 miles out of Cleveland, waitress help is scarcer than homes without TV, and just then there were no students on campus to don white aprons or jackets.

One steaming morning, an administration officer came into my office and, with an ingratiating greeting, seated himself. My office is air-conditioned (at my own expense and by my particular method, I hasten to interpolate) and dropping in on me in summer is not a true gauge of my

popularity. However, this visit proved to be not social, but professional.

"Our president, as you know, is leaving us to reenter the ministry," my visitor said, "and it seems appropriate that we give him a farewell dinner. We have set the date," he added nonchalantly mentioning an evening a mere 98.6 hours away.

A college food service director learns never to lift a quizzical eyebrow, for after all she of her own free will chose this profession so rich with surprises, so replete with early deadlines.

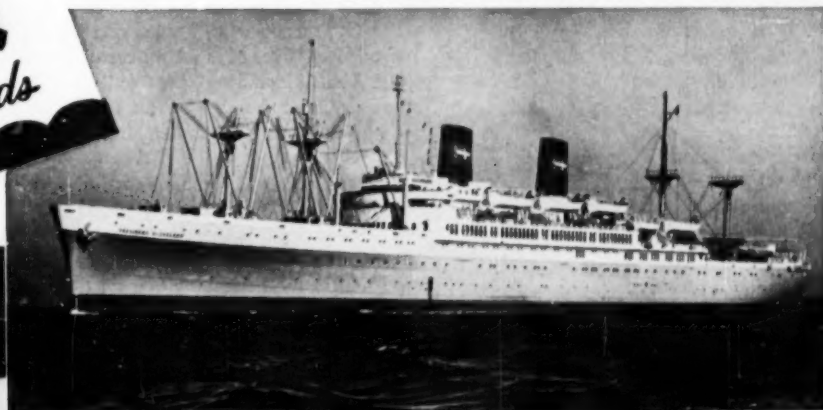
"That means opening up another dining hall and, if I do that, where in the —," this I was saying to myself,

Unvarying excellence

However far from shore, the steamers of the famed President Lines are always on common ground in serving Sherman Blend Exquisite Coffee. In public eating places everywhere, travellers have come to know this custom blended guest coffee—so distinctive for its limpid clarity, smooth flavor and bracing body. It is the epitome of our 71 years of specialization in blending, roasting and packing coffee for those who serve the public. We back it by our reputation; it will enhance yours.

Sexton
Quality Foods

SS PRESIDENT CLEVELAND, American President Lines



JOHN SEXTON & CO., CHICAGO, 1954

What goes into and
what comes out of a

Food Service Work Manual

SCOTT WILSON

Principal Food Service Manager
University of California, Berkeley

A WORK MANUAL IS A NECESSARY part of a university food service program. It serves as a training guide to new food service managers, and it provides a valuable reference book for old members of the managerial staff.

Developing a satisfactory working manual, procedure book or, as the army called it, a technical manual is a continuing process with new material constantly being added, old material being changed, and from time to time material being discarded. To allow for this constant state of flux, we find a loose-leaf folder of ordinary letter size the best cover for our work manual.

MANUAL CONTAINS TWO CHARTS

Probably the most important single value of the work manual rests in the explanation of the various forms that every food service manager has to use. Our work manual contains two charts: one shows the *chain of authority* from the chancellor of the university through the business manager to the

residence halls supervisor, and finally to the principal food service manager, and the other is an *organization chart* showing the relationship of the principal food service manager to the various food service establishments. The latter chart indicates that the principal food service manager has a supervisory capacity over five of the university dining halls, including the central commissary, and that he has an advisory capacity over five other dining rooms.

In the manual is a calendar showing the dates of the first and last meals to be served each semester and the first and last meals for each recess period within the semesters. Attached also is a general university calendar with the relationship of the food service calendar shown.

There is a brief statement of the food service objective, which is "to supply the largest quantity of well prepared nourishing food possible for the money paid by the customer." This relatively simple statement implies to

us a great many things. For instance, in order to have a "large quantity" of food available we try to keep labor costs low; we endeavor to maintain a budget ratio of twice the amount spent for raw food that is spent for labor. In order to have "well prepared" food, we must have good recipes, a well trained staff, and adequate equipment. "Nourishing food," it seems to me, excludes food substitutes, food extenders, and, in many cases, prepared mixes.

SERIES OF FINANCIAL CHECKS

In order to keep careful track of the "money paid" it is necessary for us to have a whole series of financial checks from our daily cost sheet through our monthly financial statements, and finally there is "the customer." Most of our customers are students, whom we regard as highly intelligent, cooperative and interested in our success. To keep our managers in touch and in constant communication with our customers, we have two methods—student menu committees and pamphlets. These means of communication will be discussed later.

A large section of our work manual is devoted to the explanation of the university forms that must be filled out by each food service manager. Under financial control each manager has to fill out a daily issue sheet, showing food cost and labor cost compared with the day's income. In connection with personnel the manager has a statement of hourly rates and also all of the union rules that apply to her kitchen.

The following forms are presented in the work manual with cover sheets explaining exactly how to fill the forms out and where they should be signed by the various people concerned: There is an application or bi-

UNIVERSITY OF CALIFORNIA		WEEKLY MENU				BERKELEY CAMPUS	
From	to	Dining Hall					
		FRUIT SALAD, SALAD	ENTREE	CEREAL POTATO	VEGETABLES	OTHER	DESSERT
B	Monday						
L							
D							
B	Tuesday						
L							
D							
B	Wednesday						

Form used to simplify menu planning, ordering and review in central office.



Photo courtesy N. C. Cohen and Son, Columbus, Ohio



Seating for approximately 600 is provided in this colorful cafeteria.

This beautiful, four-floor building is approximately 400 feet long and 200 feet wide.

Libbey Heat-Treated Tumblers give efficient service in Ohio State University's new Student Union Cafeteria

Bic, beautiful and as modern as tomorrow, Ohio State's new Student Union is a rather unusual building—it was planned and financed by the students themselves.

The \$4,100,000 structure, dedicated in 1951, is the center of Ohio State's student social life. Here, in its almost 200,000 square feet of floor space, are the finest of recreational, social, cultural and eating facilities, as well as office space for student activity groups and numerous other conveniences to serve the extra-curricular needs of the more than 18,000 students at the University.

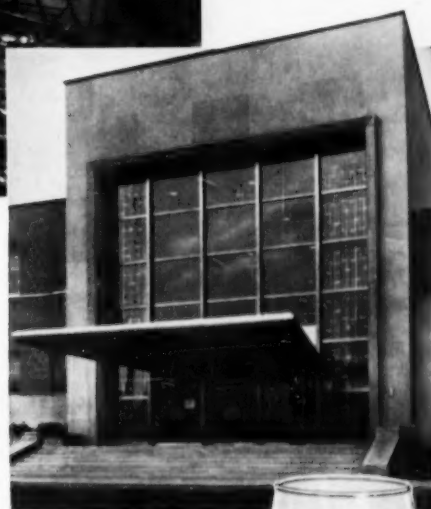
When it came to glassware, the Union wanted a service that had both a quality look and feel, yet would stand up in hard service. That's why Libbey Heat-Treated Tumblers were selected.

Libbey Heat-Treated Tumblers

are specially processed to stand up 3-5 times longer than ordinary tumblers under the heaviest service conditions. They take hard knocks and sterilization temperatures in stride. Through reduced breakage, you need fewer glassware replacements, smaller inventory, less storage space. And you get additional savings through Libbey's chip-resistant rims, guaranteed: "A new glass if the rim of a Libbey 'Safedge' glass ever chips."

You'll find Libbey Glassware in the finest hotels, restaurants and clubs in the land. It will pay you to investigate the many advantages of Libbey Glassware . . . for whether your operation is large or small it can afford fine Libbey service.

Your Libbey Supply dealer is ready with all the details. Call him today or write Libbey Glass, Division of Owens-Illinois, Toledo 1, Ohio.



No. 633
5 oz.
Juice



No. 606
12 oz.
Iced Tea



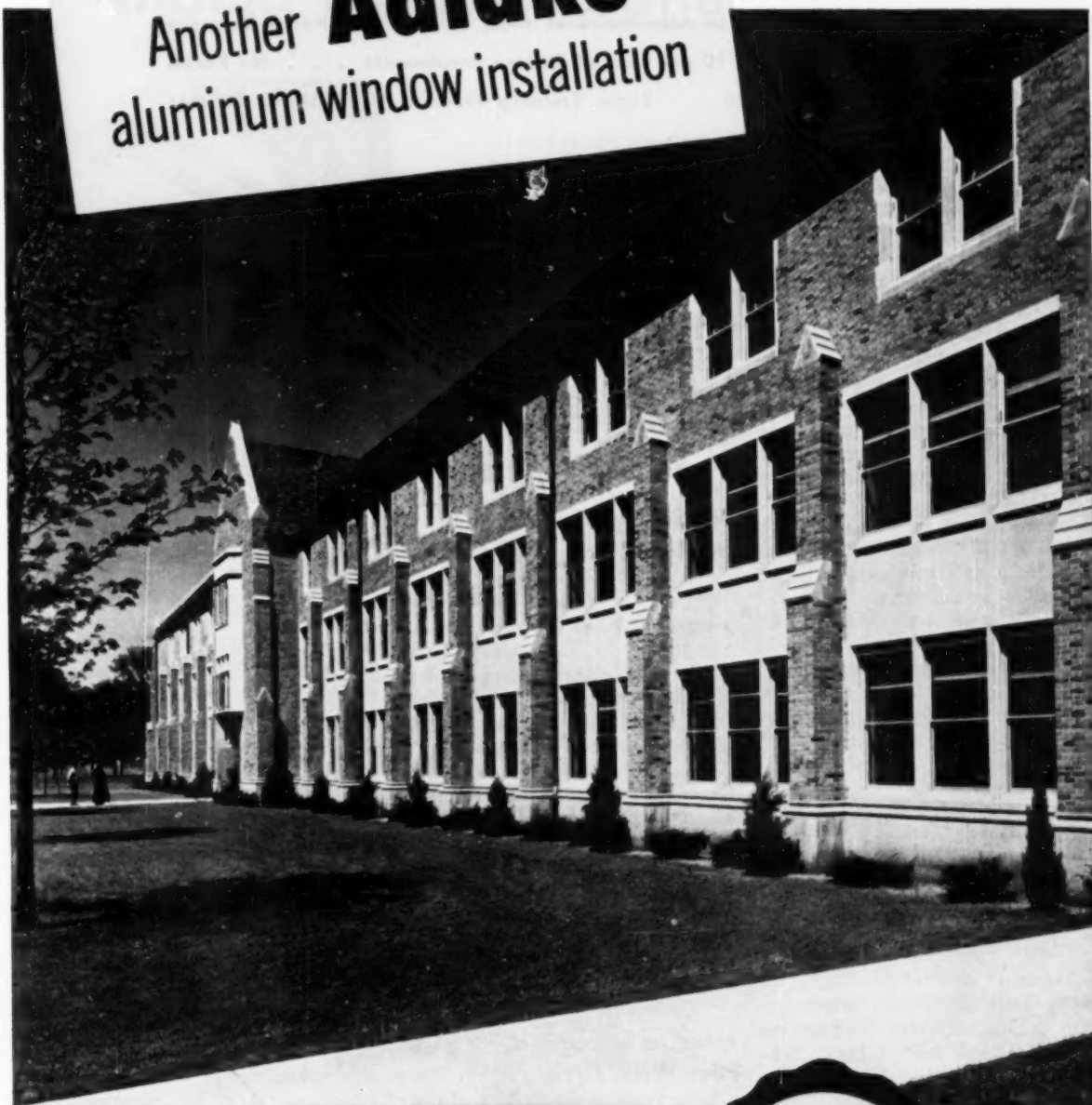
No. 610
9½ oz.
Beverage

LIBBEY SAFEDGE GLASSWARE
AN **Ⓢ** PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

COLLEGE and UNIVERSITY BUSINESS

Another **Adlake** aluminum window installation



O'Shaughnessy Hall of Liberal and Fine Arts, University of Notre Dame, Notre Dame, Indiana.
Architect: Ellerbe and Co., St. Paul, Minn. General Contractor: McGough Brothers, St. Paul, Minn.

- Minimum air infiltration
- Finger-tip control
- No painting or maintenance
- No warp, rot, rattle, stick or swell
- Wool woven-pile weather stripping and exclusive patented serrated guides

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This window meets or exceeds
all quality industry specifica-
tions for aluminum windows

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of serving the transportation
and building industries

NEWS

**Moderate Increases in Attendance at Most Schools . . . Korea Veterans
Comprise Less Than 10 per Cent of College Enrollments . . . No Racial
Problem at Amarillo . . . Begin Training Program for Business Officers**

Few Korea Veterans Going to College

WASHINGTON, D.C.—Preliminary enrollment records show that there is a smaller percentage of Korea G.I.'s attending college than was the case of World War II students. At the present time less than 10 per cent of the total college enrollment is veterans who have been released from service since the G.I. act, known as Public Law 550, became effective in June 1950. Of the 3,000,000 released since that time, only 300,000 are now enrolled.

Smaller attendance of veterans is attributed to the fact that many of the present veterans had seen service in World War II, and another reason is that many had been permitted to complete their college work by Selective Service deferment.

The Association of American Colleges reports that the present structure of P.L. 550 is in part responsible for the decline in enrollments and in the fairly high rate of drop-outs.

Selected for Training College Business Officers

TUSKEGEE INSTITUTE, ALA.—Tuskegee Institute recently announced that an intern training program for college business officers began September 13 with the arrival of new students for the fall semester.

This program, designed to help meet a long felt need in many colleges, is made possible through an arrangement with the Phelps-Stokes Fund and the General Education Board.

At least 12 months of intensive work experience in the several business areas of the college will constitute the core of the program. This will include assignments in plant maintenance, construction management, cafeteria operation, hospital services, accounting and purchasing. In addition,

the training experience will be enriched by special lectures, seminars and field trips to other institutions, including the Tuskegee V.A. Hospital.

This program has been developed with the cooperation of the American Association of College Business Officers. A grant of \$10,000 has been made available for a 12 month training period for six selected interns.

No Segregation Problem in This Texas College

AMARILLO, TEX.—For the last three years Amarillo College, a two-year institution founded 25 years ago as a part of the city public school system, has operated on a nonsegregated basis and reports that not a single unpleasant incident has grown out of attendance by both whites and Negroes. The college has no segregation as to classrooms, restrooms, drinking fountains, cafeteria, sports or extracurricular activities, such as music groups.

Though segregation is still practiced in the city of Amarillo, the school board was nearly three years ahead of the U. S. Supreme Court decision that segregation in public schools was unconstitutional.

Joins in Education Pact With Turkey

NEW YORK CITY.—New York University has joined in a \$1½ million cooperative program with the Turkish Ministry of Education and the University of Ankara in Turkey.

The three-year program, announced recently by Dr. Henry T. Heald, chancellor of New York University, will be financed by the Turkish government and the Foreign Operations Administration of the United States. A staff of professors and other specialists from N.Y.U. will be sent to Turkey to help the University of Ankara.

Most Colleges Report Attendance Increases

CINCINNATI.—Seven out of every 10 American universities and colleges report moderate increases in total attendance of full-time students this autumn as compared with a year ago.

A strong factor in these gains are larger freshman classes, Dr. Raymond Walters, University of Cincinnati president, reported after studying enrollment estimates from registrars of 518 approved institutions in all parts of the country.

These estimates are preliminary to specific full-time and part-time figures that will be published in Dr. Walters' 35th annual December enrollment study covering more than 800 universities and four-year colleges on approved lists of regional and national associations.

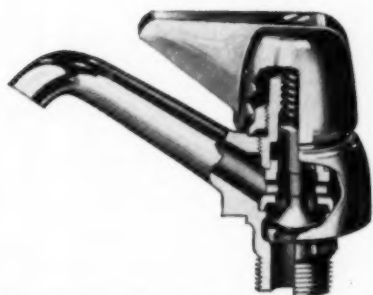
There are numerous independent four-year colleges of arts and sciences which report either no change or slight decreases in total full-time and freshman numbers. "To some of these colleges," Dr. Walters said, "the future rush of students will probably be welcome. The most pressing vocational demands of the nation are reflected in the big freshman classes of teachers colleges and technological schools."

As was true a year ago, Korean war veterans again have added only a small fraction to the normal number of freshmen who enter college direct from high school.

"A considerable proportion of the G.I.'s registered under the Veterans Readjustment Assistance Act of 1952 are not full-time students but are engaged in part-time study, many of them in city universities," Dr. Walters noted. "They thus receive up to \$50 per month educational entitlement while holding regular jobs."

Emphasizing that part-time students are not included but full-time

Why your new building program should include Crane plumbing



Cutaway view of Crane Dial-ese faucet shows how it closes with the water pressure . . . which makes it so easy to operate. Stem threads above the packing prevent corrosion or liming and are permanently lubricated for long life. All moving parts are enclosed in a simple replaceable cartridge for easy maintenance—and this one standard cartridge fits all Crane faucets.

Certainly any equipment that students use should be efficient, durable, and easy to maintain. That's one big reason to include Crane plumbing fixtures in your new building plans. The Crane equipment you install today will serve generation after generation of students.

For your school—as for your home—it's always wise to insist on Crane—the preferred plumbing!



Bigger enrollments call for bigger schools. Fortunately, today's new buildings do more than just add needed space. They add efficiency, too . . . because they are far better planned than the older buildings they replace or augment.

For example, it's been found that proper placement of washrooms saves students' time and can cut corridor congestion. Instead of a few large washrooms, the modern idea is to have frequent small ones . . . strategically

placed near study rooms, assembly or lecture halls, cafeterias, play exits.

Your architect knows about this. Let him know your preference for Crane.

CRANE CO.

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NEWS

students only, Dr. Walters cited enrollment estimates of attendance this autumn at typical large universities as follows:

State universities: Arizona, 5217; California (all branches), 33,173; Colorado, 8000; Connecticut, 6800; Idaho, 3150; Illinois, 23,500; Indiana, 12,500; Iowa, 8400; Iowa State, 8200; Kansas, 7500; Louisiana State, 6861; Massachusetts, 4362; Michigan, 18,750; Michigan State, 14,000; Minnesota, 20,000; Montana State, 2450; Ne-

braska, 7000; Nevada, 1287; New Mexico, 3500; North Dakota, 2650; Ohio State, 20,500; Oklahoma, 9899; Oregon, 4400; Oregon State, 5200; South Carolina, 3375; South Dakota, 1600; Texas, 15,928 (grand total); Utah, 6600; Vermont, 2652; Virginia, 3500; West Virginia, 4676; Wisconsin, 15,650; State College of Washington, 5100.

Privately controlled universities: Brown, 2968; Columbia, 10,800; Cornell, 10,052; Creighton, 2100; Denver,

3600; Detroit, 5750; Emory, 2974; Fordham, 6300; Johns Hopkins, 2150; Princeton, 3496; Rochester, 3200; St. John's (Brooklyn), 3200; Southern California, 8522; Temple, 3900; Washington (St. Louis), 5000; Western Reserve, 3300.

Of all institutions reporting, 73.4 per cent show increases, 18 per cent no change, and 8.6 per cent small decreases in estimated full-time enrollments. There are more increases in coeducational schools than in separate colleges for women and for men, both in respect to total attendances and in freshman enrollments.

Among publicly controlled universities, 90.9 per cent report gains up to 29 per cent in full-time students, 6.8 per cent no change, and 2.3 per cent slight decreases. Among privately controlled universities, 40 per cent show increases up to 10 per cent, 50 per cent no change, and 10 per cent small decreases. Among independent colleges of arts and sciences, 69.5 per cent report gains up to 55 per cent, 20.6 per cent no change, and 9.9 per cent decreases up to 24 per cent.

Among technological institutions, 75 per cent show gains up to 30 per cent, 15.6 per cent no gain, and 9.4 per cent decreases of 1 to 10 per cent. Among teachers colleges, 89.9 per cent show increases up to 39 per cent, 4.3 per cent no change, and only 5.8 per cent record decreases.



New Philadelphia, Ohio, Schools solve perennial maintenance problem with Huntington Products



Library desks and wood floors beautified and protected with SEAL-O-SAN!®

MR. F. B. FUERST, Superintendent of Buildings and Grounds, New Philadelphia City Schools, Ohio, writes, "We are enclosing a picture of our library which has been rejuvenated by scrubbing the floor with Rex Crystals, sealing with two coats of Penetrating Seal-O-San, then two coats of Weatherall Wax. The tables, chairs and woodwork have been finished with the penetrating seal. We've found it saves us money and makes cleaning much easier." Write for new booklet entitled "Sweeping and Mopping Floors."

Penetrating Seal-O-San Weatherall Wax

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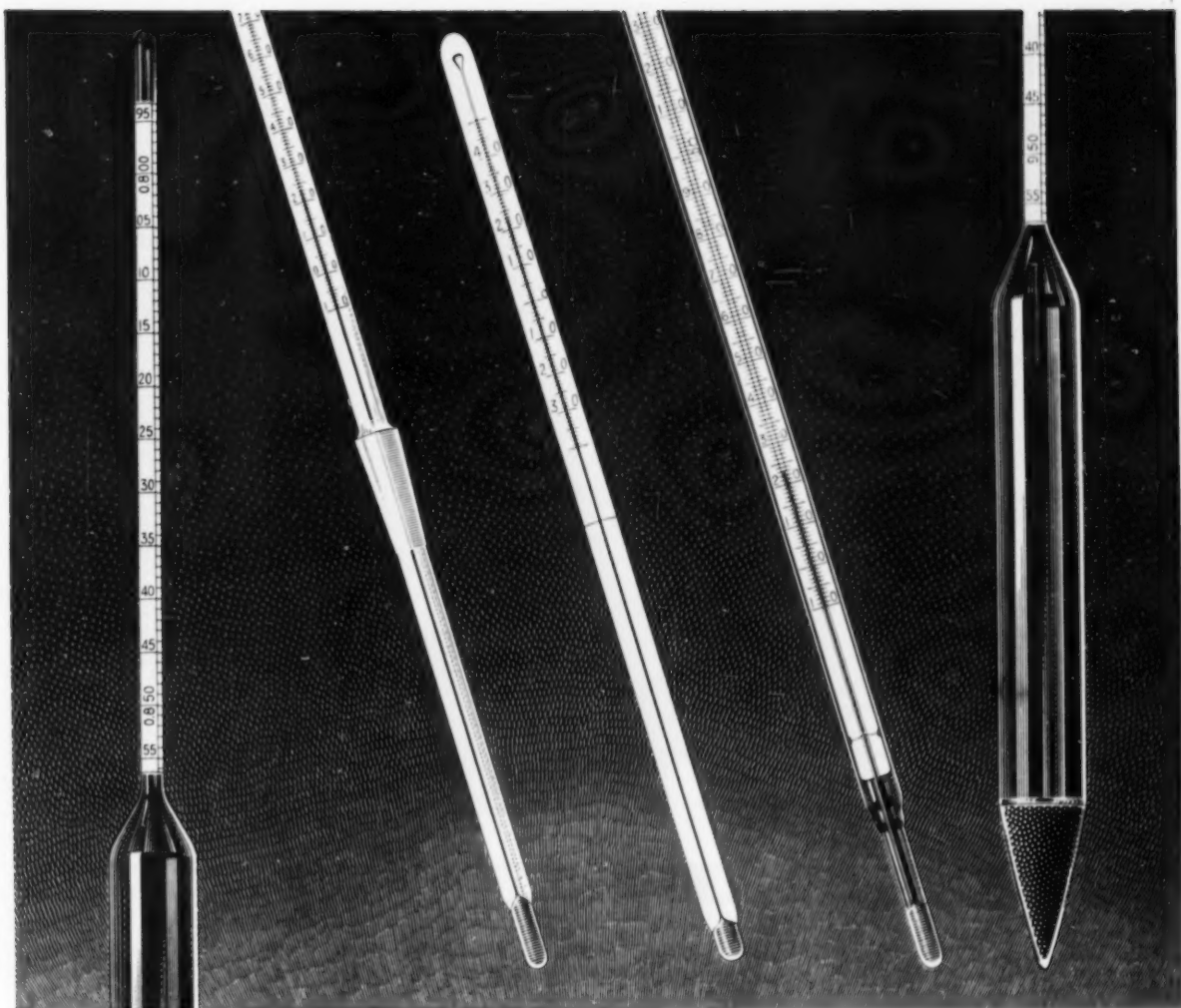
Stanford Launches Its Biggest Building Program

STANFORD UNIVERSITY, CALIF.—Stanford University has launched its biggest building program since the arches of the Inner Quadrangle began to rise in 1887.

Five major buildings, two already under construction and three for which working plans are nearly complete, total up to \$5,310,000 worth of new construction.

A new \$3¼ million residence hall for freshmen men is now in process of construction and will house 704 students in eight three-story living units arranged in a quadrangle. The central area will contain administrative and dining facilities. Work also is proceeding on a music building, which will be a part of the Stanford student union group, and on an addition to Bowman Alumni House, home of the Stanford Alumni Association.

COLLEGE and UNIVERSITY BUSINESS



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If your work demands accuracy, demand Kimble glassware



Thermometers: You can always see the calibrations on Kimble etched-stem thermometers. Kimble uses a "color filler" which makes lines and numbers easy to read. This filler is as resistant to chemical attack and mechanical abrasion as the thermometer glass itself.

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mometers to insure permanent accuracy in use.

Hydrometers: Kimble hydrometers are made from tubing having heavy walls in which the glass is evenly and uniformly distributed. Blanks are thoroughly annealed to increase mechanical strength. Scales are inscribed on strong, white ledger paper and are firmly attached to stems. All Kimble hydrometers are calibrated in accord-

ance with specifications of the National Bureau of Standards and the American Society for Testing Materials.

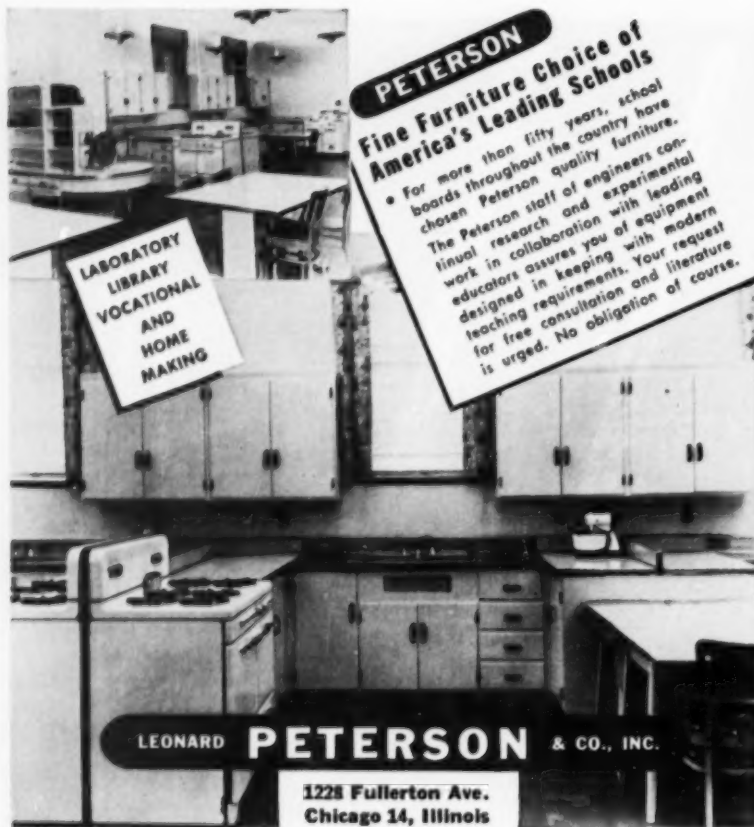
Every Kimble thermometer and hydrometer is individually tested and re-tested to insure its accuracy. There is a Kimble glassware item for every laboratory requirement. Ask your laboratory supply dealer or write to Kimble Glass Company, subsidiary of Owens-Illinois, Box 1035, Toledo 1, Ohio.

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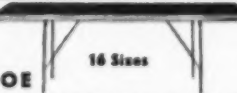
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NEWS

10 New Buildings for University of Michigan

ANN ARBOR, MICH.—As a result of recent action by the board of regents of the University of Michigan, the institution is now involved in a \$12,825,000 construction program. The completion dates for the 10 new buildings are expected to range from December 1954 to July 1956.

Three of the 10 buildings under construction are being built from funds appropriated by the legislature. These include \$500,000 for the library stack unit on North Campus, a \$200,000 children's hospital, psychiatric unit, and the \$950,000 heating plant boiler addition. The \$675,000 addition to the law library is being constructed partly from state funds.

LETTERS TO THE EDITOR

Sirs:

T. E. BLACKWELL HAS PERFORMED A service in his article in the August issue calling attention to decisions that have held certain pension payments to be tax exempt as gifts. The passage of time since Mr. Blackwell's writing permits us to add to his excellent list of cases *Abernethy v. Commissioner* in the Court of Appeals for the District of Columbia, 211 F.2d 651, and an affirmation by the Court of Appeals for the Sixth Circuit in *Kavanaugh v. Hershman*, 210 F.2d 654. Of course, Mr. Blackwell has emphasized the fact that attempts to qualify under these decisions are not likely to meet with ready acceptance from the Internal Revenue Service, and this is particularly true since the determination involved is one of fact which can be relitigated in each new case.

Mr. Blackwell may not have sufficiently emphasized, however, the very limited nature of the situations which, with any degree of assurance, could be expected to be brought within the scope of these decisions. The grant of pension payments in each of these cases was made after the retirement of the clergyman, and no contractual obligation of continued payments was undertaken. Furthermore, it does not appear that during the period of employment any reasonable expectation of the pension in question was given which might serve as some sort of a consideration. All four of these cases (*Hershman*, *Abernethy*, *Mutch* and



From Aachen to Ziganpu...

This geography class sees and hears its world in true fidelity

Children learn faster—retain longer—when the sights and sounds of the world are presented to them clearly, vividly... in the matchless realism of sound movies. And for this geography class, sight and sound are as close to perfection as portable 16mm. projector design has yet made possible.

Their projector is the Kodascope Pageant Sound Projector, Model AV-151—a powerful 15-watt machine with a matched, big-volume, 12-inch speaker. Its separate bass and treble controls... its great reserve of output and reproductive capacity... and its unique Fidelity Control which makes

possible precise focusing of the scanning beam regardless of sound-track position... afford matchless control over sound reproduction. And its superb optical system, featuring a built-in "field-sharpening" element, provides visual quality to match the excellence of the sound.

From Belgium to the Orient... the sights and sounds of the whole wide world around are crisp, clear, vivid.

Choice of six brilliant models

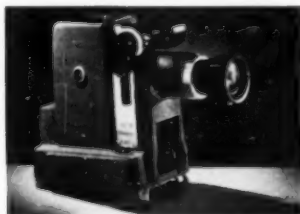
The Model AV-151 is one of six Pageant models starting at just \$425, a complete line of 16mm. sound and sound-silent projectors that will enable you to meet exactly and easily your particular projection require-

ments. You can get extra brightness for hard-to-darken rooms... extra power and speaker capacity for auditoriums and other acoustically difficult locations... flexible controls for the ultimate in sound quality.

And most important, with every Pageant model, you get the matchless convenience... the additional mechanism life... of permanent pre-lubrication. Kodascope Pageant Sound Projectors are lifetime lubricated at the factory to banish completely the danger of under- or over-oiling—chief cause of projector breakdowns.

Get the story on the complete Pageant line from your Kodak Audio-Visual Dealer. Mail the coupon for his name and address.

Prices subject to change without notice.



new Kodaslide SIGNET 500 Projector, Filmstrip Model

It's completely new! And it has the smoothest, surest, fastest film-advance ever designed!

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"In spite of all we tell customers about how to oil projectors properly, too many of them never seem to do it right or at all. So it's a welcome relief to be able to offer Kodak's lifetime-lubricated Pageant."

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"Since so many different people—teachers and students alike—operate projectors, proper maintenance is a matter of luck. With permanent lubrication, maintenance is no problem. Anyone who has a Pageant is lucky in more ways than one!"

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your spectacular acceptance of

we are overwhelmed, excited . . . and proud!

Eighteen months ago we brought forth a new concept of Advanced Design in school furniture.

Your immediate acceptance at the A.A.S.A. convention in Atlantic City last year . . . your flood of orders in the months following, were conclusive proof that you were eager to open the doors to a new era in the classroom.

Your unprecedented acceptance of the Brunswick line is striking evidence that today's school business official is more than capable of enhancing modern teaching methods and objectives with the most effective and appropriate plant and equipment.

You confirmed our belief that school furniture should be functional in terms of Advanced Design. Yes, you wanted mobility and flexibility . . . you wanted color . . . you wanted stacking and nesting

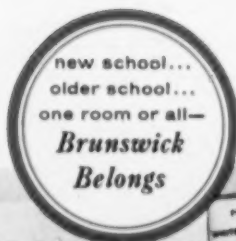
. . . you wanted adaptability . . . you wanted constructional innovations in material and detail . . . you wanted all of the things that Brunswick and Brunswick alone is offering to you for the first time in the school furniture field.

The moment the scope of your acceptance was shown we took immediate steps to expand our production. To those of you whose orders we were unable to fill for delivery this fall, our deepest apologies. Today we are in a position to meet your full requirements . . . to satisfy your needs according to the schedule you suggest.

To those of you now considering the purchase of new furniture, the acclaim of your colleagues across the nation for the new Brunswick line *demands* that you too give Brunswick your deepest consideration.

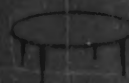
ALL MODELS AVAILABLE FOR IMMEDIATE DELIVERY

write, wire or phone for complete, detailed 40-page catalog and name of nearest Brunswick representative.





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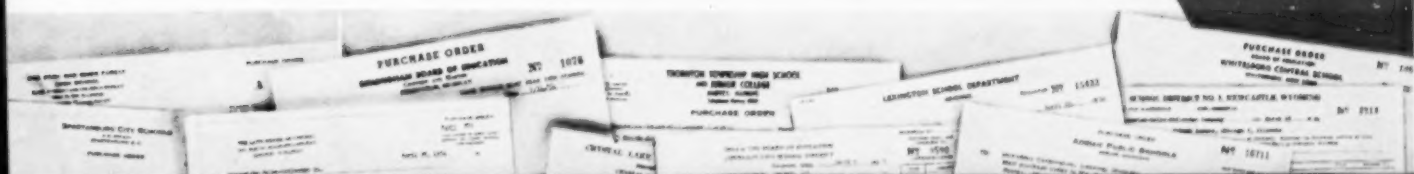


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THE BRUNSWICK-BALKE-COLLENDER COMPANY

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NEWS

Schall) involved retired clergymen, and grants of pensions to them by individual congregations. I do not believe it was merely a traditional sympathy for churches which led to these particular favorable results. The fact situation which arose in each case is most natural and appropriate to the type of action of the congregation of an individual church having only one minister which it is retiring after many years. A college or university, on the other hand, has many employees whom it

must treat uniformly. Furthermore, the whole pension tradition developed over many years in this field has been one of a reasonable expectation (at the very least) of some sort of a pension in reward for faithful service. Any pattern of action arising from these facts would probably be fatal to the contention that a gift has been made.

This is not to say that there will not be a few cases where a noncontractual supplement may possibly be provided tax free for a particular indi-

vidual, provided that the supplement is determined after retirement and is wholly spontaneous and voluntary. I merely wish to call attention to the fact that this type of treatment cannot be expected to take the place of a regular pension plan for the staff members of a college or university, whereby the staff members are given knowledge of what they can expect by way of income for their retirement years, and preferably are also given vested rights which they may take with them to other employment. Likewise a college which leaves its pension obligations to voluntary payments made after retirement will not have fully liquidated its costs of employment during the productive years of the staff member. Experience has shown that such deferment of the costs of retirement does not make for cheerful and reliable fulfillment of moral obligations, and tends to be arbitrary and capricious in operation, with overtones of charity. In short, anything which would apparently qualify under these cases would be the antithesis of the contractual, fully funded, fully vested retirement provisions that are the standard in the college world.—JOHN PAUL GOOD, secretary, Teachers Insurance & Annuity Association of America.



New
PARCOA
System
Operates Campus Parking Lots
Automatically
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Here's the practical solution to the parking problem on your campus, as already proved in actual service.

The amazing new PARCOA system does the job safely, economically and dependably—without attendants. A simple electrical mechanism controls entrance and exit gates, actuated by card-keys* issued only to authorized holders.

PARCOA equipment is low in first cost. Easy to install. Requires minimum maintenance. No attendants needed. No help problem. Coded card-key can be changed as desired.

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NAMES IN THE NEWS

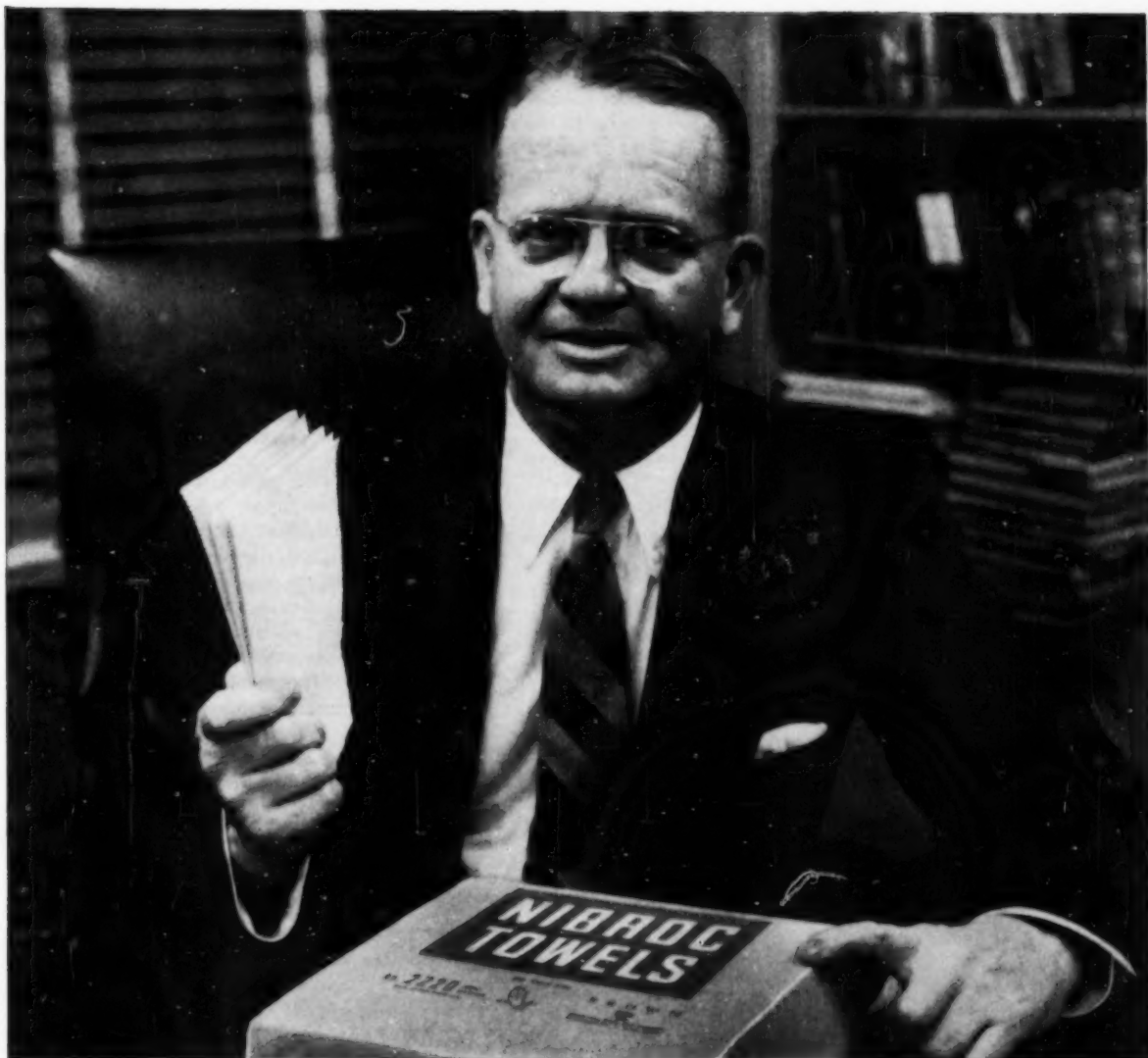
Raymond W. Kettler, business manager of Purdue University, has been appointed controller of the regents of the University of California. He will be



Raymond W. Kettler

responsible to the board of regents for the controller functions of the eight campuses of the University of California. Mr. Kettler's resignation from Purdue University becomes effective February 1, at which time he will take up his new duties in California. He has been a member of the Purdue staff since 1942, when he came to the institution as auditor. Prior to that time he had been budget officer for the State Regents of Higher Education in Oklahoma. Mr. Kettler is succeeding the late Olaf Lundberg as controller of the regents of the University of California.

Granville K. Thompson, specialist for college business management, U.S.



NIBROC® TOWELS are in a class by themselves when it comes to savings!

They're Time-Saving—Nibroc towels are ultra absorbent—dry drier, faster!

Towel-Saving—one does the job!

Maintenance-Saving—Nibroc deluxe, heavy-gauged steel cabinets are specially designed for long, trouble-free use, and to hold 50% more towels to reduce cost of servicing.

Money-Saving—Actual case histories prove Nibroc Towels go further, last longer.

Specify Nibroc towels—they are designed for every school need—in white or natural shades—for wash-room and shower bath use.

New Sofwite and Softan Toilet Tissue. Costs no more than ordinary tissue yet is softer, stronger, because "NIBROCRAFTED."* For additional savings order towels and toilet tissue together. See your classified directory

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NAMES

Office of Education, resigned, effective November 1, to accept appointment as a senior associate in the management consulting firm of Cresap, McCormick and Paget. Mr. Thompson will move to New York City to take up his new duties. No announcement of his successor has been made by the Office of Education though names of potential candidates are being received.

William Ricks, recent graduate of the University of Illinois, with a major in accounting, has been named business

manager of Illinois College at Jacksonville. Mr. Ricks succeeds **Anthony Niccum**, who resigned recently to accept appointment as purchasing agent at Northern Illinois State Teachers College, DeKalb.

Russell G. Young, budget and fiscal officer at Wright-Patterson Air Force Base, Dayton, Ohio, has been named purchasing agent at Miami University, Oxford, Ohio. He succeeds **Foster J. Cole**, who recently was promoted to the post of business manager.

George F. Baughman, former business manager of the University of Florida, has been appointed to the newly created position of vice president for business affairs, and **Dean Harley W. Chandler** has been named to the post



George F. Baughman



Harley W. Chandler

of vice president of academic affairs. The changes are the result of a reorganization of internal administration at the University of Florida and represent an attempt both to centralize and to eliminate an excessive number of administrative personnel reporting directly to the president.

Glynwood Jones, business manager of Shaw University for more than 22 years, has been named business manager of Virginia State College, Petersburg, to succeed **J. B. Cephas**, who becomes controller-treasurer. **Deryck Weaver**, formerly business manager at Jarvis College in Texas, will succeed Mr. Jones at Shaw University.

J. V. Anderson, dean of the school of business at Florida Agricultural and Mechanical University, Tallahassee, resigned recently to become business manager of Texas Southern University, Houston.

James E. Nagle, a member of a Pittsburgh fund raising firm, has been named director of development at Wells College, Aurora, N.Y. He has been active in civic affairs and served as a manager of several chamber of commerce organizations before entering professional fund raising work.

Rev. Martin J. Neeb, executive secretary of the department of higher education of the Missouri Synod of the Lutheran Church, has accepted the position of president of Concordia Senior College, Fort Wayne, Ind. The school is to open late in 1956. The senior college will provide the final two years of the four-year pre-theological college course for Lutheran Missouri synod ministers.

Paul Fairbrook, formerly food controller at Michigan State College, has been named director of auxiliary enterprises at Northern Illinois State Teachers College at DeKalb.

Put Safety Brakes On Your Floors

Ves-Cote FLOOR WAX

There is new safety in walking when floors are finished with Ves-Cote . . . because Ves-Cote contains a new and proven anti-slip agent, DuPont's "Ludox"* colloidal silica. These minute particles of "Ludox"* create excellent sole and heel traction—offer effective braking action for each step.

In addition to safety, Ves-Cote dries to a high lustre; is long-wearing; water resistant; easy to apply and dries quickly.

If you need safe floors, yet demand attractive floors—Ves-Cote is your answer.

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When you step on Ves-Cote, the weight of the foot forces the hard "Ludox" colloidal silica spheres into the wax particles, providing superior braking action. This way, Ves-Cote gives greater slip protection.

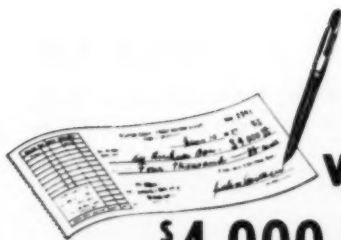


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would you turn down a savings of \$4,000 on a \$40,000 lighting expenditure?

You can enjoy the benefits of the *finest* lighting money can buy and effect really substantial savings at the same time, simply by buying the *right* lighting fixture. Time and again, the better design and efficiency of Smithcraft Fluorescent Fixtures result in *fewer units* to produce recommended lighting levels.

Here's an actual case history of how a Pennsylvania department store saved 10% in initial costs and 10% in operating costs . . . or approximately \$4000 on a ten-year \$40,000 expenditure.

Before re-lighting, a complete survey was made and exact lighting requirements were established. To meet these requirements, Smithcraft units and units of several nationally-known top quality

manufacturers were subjected to an exhaustive *comparative* analysis. Here are the results:

10% FEWER UNITS REQUIRED

Number of units required to achieve recommended lighting levels: Smithcraft — 270
2nd Best Fixture — 297
3rd Best Fixture — 339

10% LESS INSTALLATION COST

Proportionately less labor and materials were required to install the 270 Smithcraft units than the 297 units of the nearest competitor.

10% FEWER LAMPS (Initial & Replacement)

Lamps required: Smithcraft — 706
2nd Best Fixture — 776
3rd Best Fixture — 914

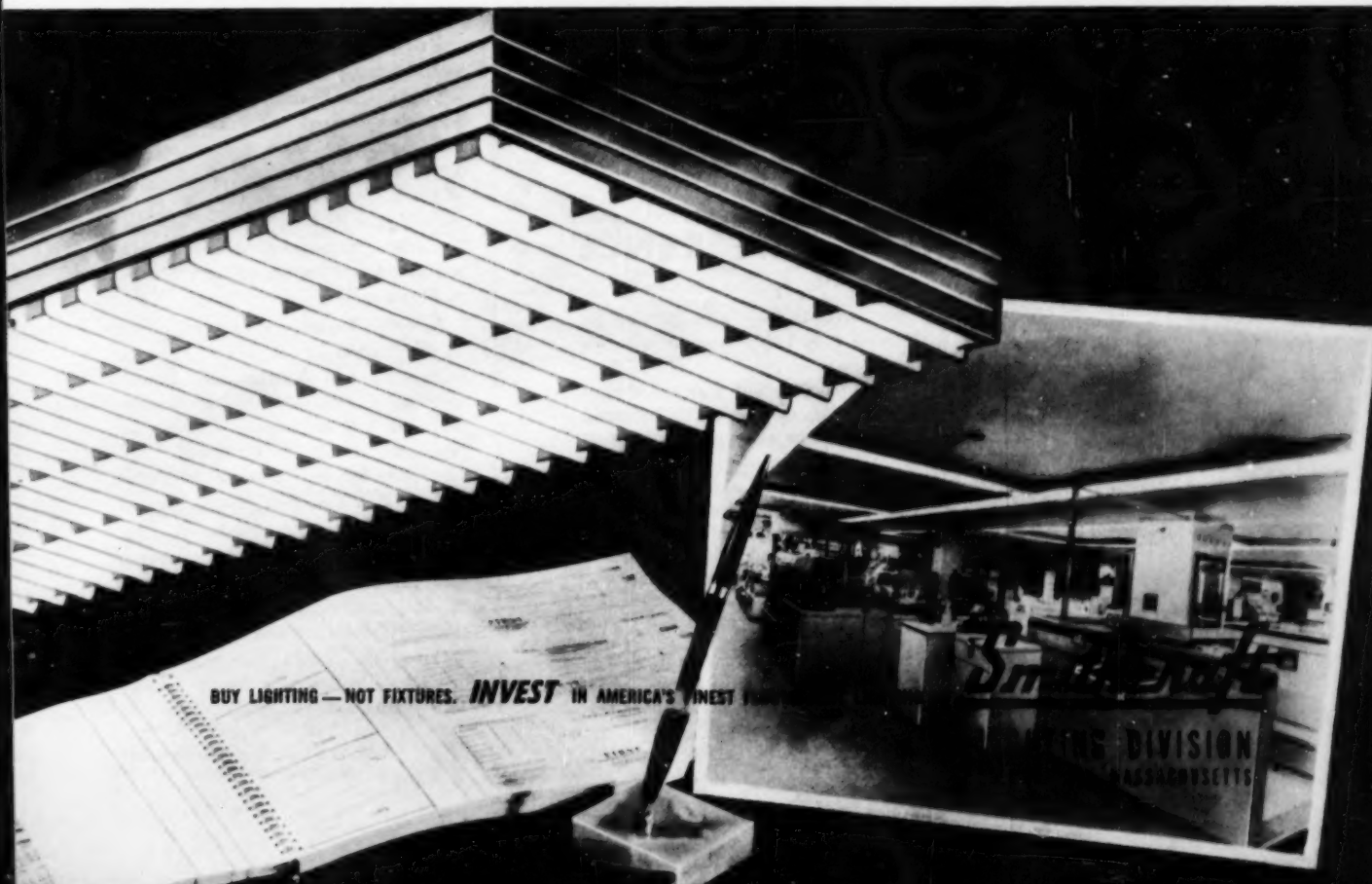
Recommended practice is to replace lamps every 18 months—a continuing 10% savings.

10% LESS POWER CONSUMPTION

Required wattage: Smithcraft: 51.3 kilowatts
2nd Best Fixture: 56.3 kilowatts
3rd Best Fixture: 64.8 kilowatts

Whether you're lighting a store, office, school, factory, or institution, it pays to *buy lighting* — not *fixtures*. Invest in Smithcraft — America's Finest Fluorescent Lighting Equipment.

PHOTOGRAPH SHOWS AN INTERESTING PATTERN ARRANGEMENT OF THE SMITHCRAFT LOUVERLITE SLIMLINE IN THE PENNA. DEPT. STORE DESCRIBED ABOVE.



NAMES



Logan Wilson

Dr. Logan Wilson, acting chancellor of the University of Texas since **Judge James P. Hart's** resignation last January, was named president of the University of Texas system. He will have the duties of the chancellorship but this title has been eliminated though the former chancellor's salary has been con-

tinued. The change in title was a result of a management survey.

Dr. Adrian Rondileau, dean of liberal arts at Pace College, New York City, is the new president of Yankton College, Yankton, S.D.

W. E. Smith, business manager of South Dakota State College, recently resigned to accept appointment as business manager of William Woods College, Fulton, Mo. **Winston W. Wolpert**, office manager of South Dakota State, has been named purchasing agent there,

Mrs. Maida Harper, business office manager, and **Ethel Shimmin**, internal auditor.

Newell J. Smith, formerly assistant director of men's residence halls at the University of Wisconsin, has been named director to succeed **S. Lee Burns**, who



Newell J. Smith

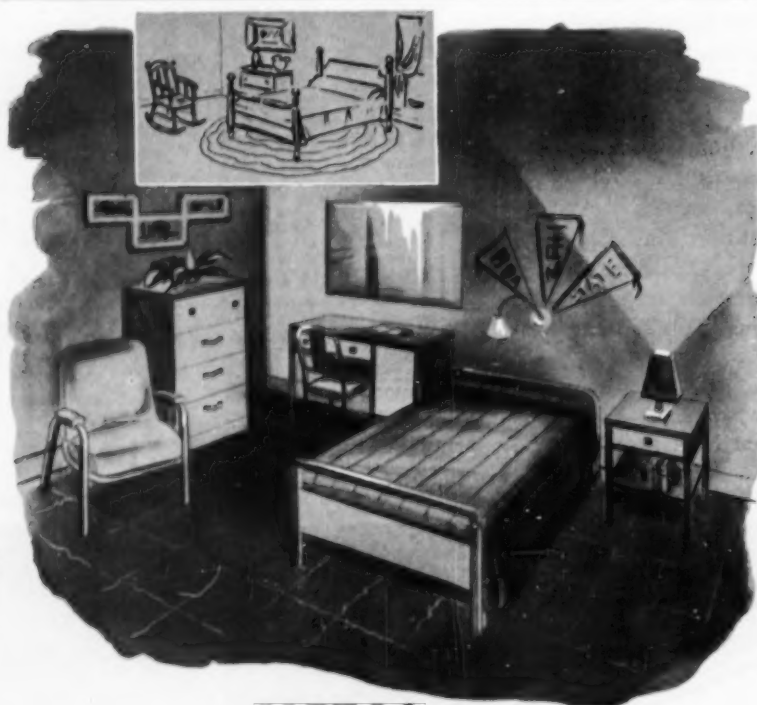
has requested a release from major responsibility for reasons of health. Mr. Burns has been head of the division of residence halls since April 1945 and a member of the university staff since 1933. Mr. Smith has been a member of the residence halls staff since 1941, with a three-year leave of absence to serve in the armed forces.

Marvin Camras, senior physicist at Armour Research Foundation of Illinois Institute of Technology, recently was named recipient of the John Scott Award for scientific achievement. This award has gone to such scientists as Guglielmo Marconi, Lee DeForrest, Dr. Irving Langmuir, and Sir Alexander Fleming. Marvin Camras was the first person to develop a practical wire recorder, which revolutionized the technic of sound transcription. The magnetic recording industry has become an \$80 million enterprise.

Ralph H. Ackerman, formerly superintendent of physical plant at the College of Puget Sound, Tacoma, Wash., has been named superintendent of buildings and grounds at Carleton College, Northfield, Minn. He succeeds **Willis L. Cuning**, who resigned as superintendent of buildings and grounds at Carleton to become assistant general secretary for properties of the Y.M.C.A. in Minneapolis.

Jack G. Taylor, endowment officer of the University of Texas, resigned recently to join the David C. Bintliff interests in Houston, and to become president and director of Commercial National Insurance Company, and vice president and director of David C. Bintliff & Co., Inc. His resignation becomes effective December 31.

The Very Rev. Thomas Huntington Chappel, dean of the Cathedral Church of St. Stephen in Harrisburg, Pa., since 1947, has been named headmaster of Hotchkiss School, a boys' preparatory school in Lakeville, Conn. **George Van Santwood**, headmaster of the



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When it comes to furniture — stronger, longer lasting Turk metal is best by far.

Turk metal furniture is fireproof, stainproof, easy to clean... and permanently beautiful. Sectional construction enables low cost maintenance or replacement of parts.



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NAMES

school since 1926, will retire at the end of the current school year.

Rev. Lawrence Richard McHugh, S.J., has been made president of Wheeling College, Wheeling, W. Va., which is expected to admit its first students next fall. It will be a coeducational college under the direction of the Jesuit Order.

Dirrell D. Sample, manager of Tufts College bookstore, was killed recently



Rev. L. R. McHugh

in an automobile accident. He had been an active member of the National Association of College Stores and the National Association of Educational Buyers.

A. Thomas Sutherland, book department manager of the Yale Co-Op, died recently after many years of service at Yale. Irving Hintz has taken over the managership.

Mother Stephanie Mohun, founder of the College of St. Mary of the Springs at Columbus, Ohio, died recently at 86 years of age. She had served 65 years in religious work.

DIRECTORY OF ASSOCIATIONS

National Federation of College and University Business Officers Associations

President: Irwin K. French, Wellesley College; vice president: Laurence Lunden, University of Minnesota; secretary-treasurer: Nelson A. Wahlstrom, University of Washington.

Convention: June 26-28, Antlers Hotel, Colorado Springs, Colo.

Association of College and University Business Officers

American Association

President: W. C. Ervin, Paine College; secretary: B. A. Little, Southern University.

Central Association

President: C. C. DeLong, University of Illinois; secretary-treasurer: T. N. McClure, Knox College.

Eastern Association

President: John W. S. Littlefield, Colgate University; secretary-treasurer: Irwin K. French, Wellesley College.

Convention: Dec. 5-7, Shoreham Hotel, Washington, D.C.

Southern Association

President: C. O. Emmerich, Emory University; secretary-treasurer: Gerald D. Henderson, Vanderbilt University.

Western Association

President: James Miller, University of California; secretary: Morris Robertson, Oregon State College.

1955 Convention: Tucson, Ariz.

Association of College Unions

President: William Rion, University of Florida; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

Convention: April 3-6, Greenbrier, White Sulphur Springs, W. Va.

National Association of Educational Buyers

President: Henry Doten, University of Maine; executive secretary: Bert C. Ahrens, 1461 Franklin Ave., Garden City, N.Y.

1955 Convention: New York City.

American College Public Relations Association

President: Francis C. Pray, University of Pittsburgh; executive secretary: Marvin W. Topping, 726 Jackson Place, N.W., Washington 6, D.C.

Convention: June 30-July 2, Drake Hotel, Chicago.

National Association of College Stores

President: Carl Birdwell, A&M College of Texas, College Station; executive secretary: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio.

College and University Personnel Association

President: L. H. Glander, Michigan State College; secretary-treasurer: M. S. Hendrickson Jr., University of Colorado; executive secretary: Donald E. Dickason, University of Illinois. Permanent headquarters, 809 S. Wright St., Champaign, Ill.

National Association of College and University Housing Officers

President: M. R. Shaw, Cornell University; vice president: F. C. McConnell, University of Texas; secretary-treasurer: Ruth N. Donnelly, University of California, Berkeley.

National Association of Physical Plant Administrators of Universities and Colleges

President: Wesley Hertenstein, California Institute of Technology; secretary-treasurer: A. F. Gallistel, University of Wisconsin.

1955 Convention: University of Wyoming, Laramie.

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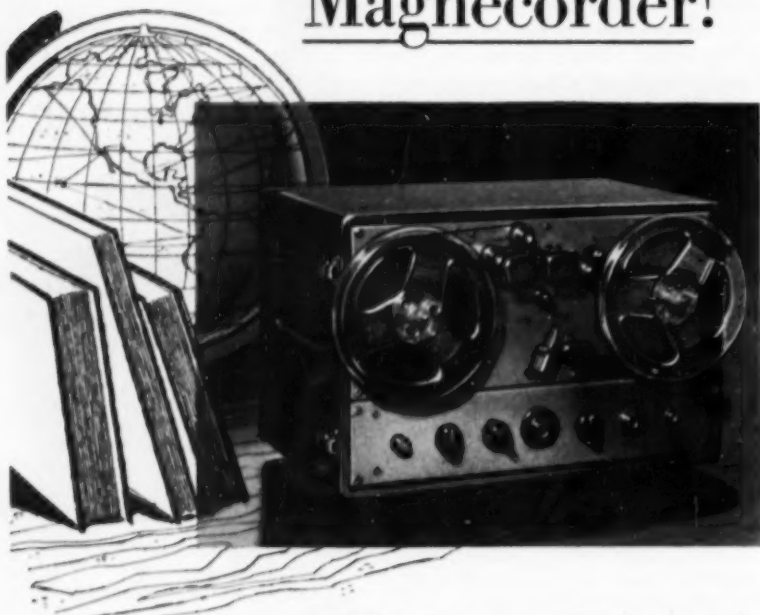
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Anticipated Enrollment Increase Poses Problem

CHICAGO.—Most of the time of the 600 delegates to the annual meeting of the American Council on Education in this city on October 13 to 15 was devoted to devising ways and means for providing facilities and staff for the expected wave of students in the next five to 10 years. It was suggested by several speakers that one method of meeting the problem would be to encourage a larger proportion of students to take two-year terminal courses, rather than a four-year liberal arts course. It also was suggested that the duration of formal education for superior students could be decreased and in that way reduce the amount of time that such students would have to spend in college.

Many were of the opinion that space utilization studies should be conducted to make certain that there is the greatest amount of efficiency in the use of present facilities. Another suggestion as to how an institution might meet the uprise of enrollment was to raise the academic qualifications for admittance. There was a feeling on the part of some that this would tend to limit higher education to the intellectually elite and work against the full effectiveness of higher education.

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The rates for classified advertisements are: 20 cents a word; minimum charge, \$4. (No charge for "key" number.) Forms close 25th of month preceding date of issue.

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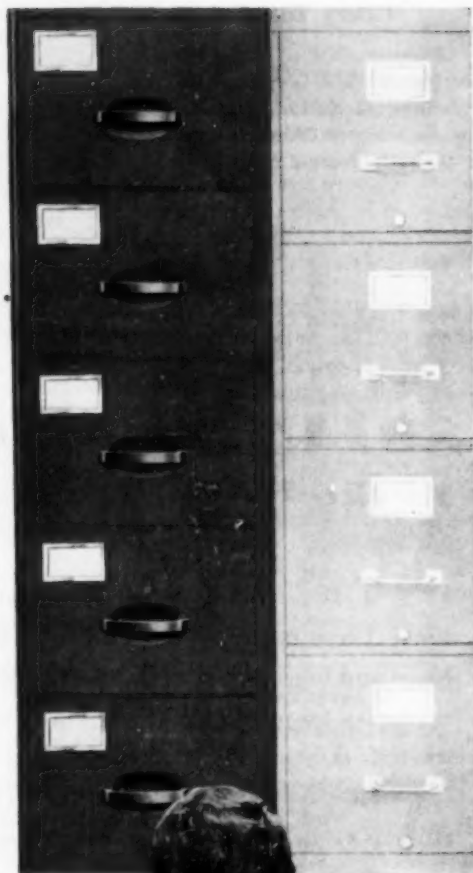


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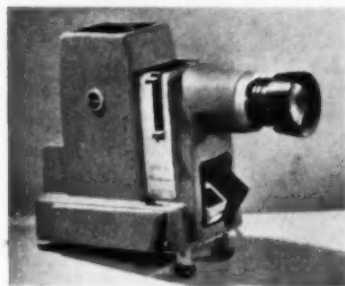
WHAT'S NEW

November 1954

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 84. Circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Signet 500 Projector for Filmstrips and Slides



The new Signet 500 Kodaslide Projector can be quickly converted for showing single-frame filmstrips or 2 by 2 inch slides to large and small groups. The Kodaslide Filmstrip Adapter is easy to load and protects the filmstrip from scratching. A Geneva mechanism rapidly and accurately advances the filmstrip and the film can be reversed to show previous frames.

A semi-automatic take-up changer permits 2 by 2 inch slide projection. Slides are fed singly from the top of the projector, eliminating jarring and unintentional repetition. After projection each slide slips into a receiving box which accepts a group of slides in the order in which they are shown. A quiet, impeller type blower protects the film and provides cool, comfortable operation. Eastman Kodak Company, Rochester 4, N.Y.

For more details circle #1 on mailing card.

Pedestal Base Tables for Cafeterias

Two new tables were introduced recently especially for cafeteria use. They have single or double pedestal bases designed for perfect balance. The single-pedestal table has an island-type base with four flat horizontal legs, each equipped with an adjustable glide to give the table stability on uneven floors. On the two-pedestal table each has three horizontal legs to give good balance as well as comfortable leg room. Table bases are of heavy gauge, formed sheet steel in black crinkle finish with satin-finished kickplates to protect from scuffing. Royaloid is used for table tops with aluminum or self edges for easy cleaning. Tops are available in nine linen and wood grain colors. Tables are available in 30 to 42 inch square or round tops with one pedestal and in sizes from 30 by 60 inches

to 36 by 72 inches in the larger double-pedestal styles. Royal Metal Manufacturing Co., 175 N. Michigan Ave., Chicago 1.

For more details circle #2 on mailing card.

Straw Dispenser Fulfills Sanitary Requirements

Straws are emptied into the Duplex Straw Dispenser without being handled and are dispensed one at a time from each side of the unit. They are completely covered, even on the ends, in the dispenser. The "magic-touch" dispensing principle eliminates jamming and makes straw dispensing fast, accurate and easy.

The all stainless steel unit is easily cleaned and kept sanitary. It disassembles in seconds and is as quickly re-assembled after cleaning. One model holds a full carton of 6½ inch milk or 8½ inch



standard straws. A second model holds 8½ inch jumbo straws. The dispenser has a self base for table or counter use, operates economically, eliminates wrapper nuisance and is designed to comply with all sanitary requirements. Duplex Straw Dispenser Co., 511 N. La Cienega Blvd., Los Angeles 48, Calif.

For more details circle #3 on mailing card.

Torque-Bar Operation of Auto-Lok Aluminum Window

An Auto-Lok Aluminum Awning Window is now available with Torque Bar Operation. The window retains all the fundamental operating principles of the Auto-Lok Standard Window. The new Ludman Torque Bar brings in the bottom night vent without exerting pressure on the hinge points of any other vents, which are locked automatically by the patented Ludman Auto-Lok operating principle.

The new Model B torque bar assembly is radially splined for strength and the

bar is completely concealed in the sill. All anchor housings have been eliminated on the jambs for smooth, clean appearance. The Ludman Power-Light Operator in either over the sill or angle type styles provides smooth and easy operation with maximum power. The new Auto-Lok Torque Bar Aluminum Awning Window is available in the same types and sizes as the Model A Auto-Lok Standard Window. Ludman Corporation, North Miami, Fla.

For more details circle #4 on mailing card.

Ready-Framed Boards for Easy Classroom Installation

Modular-4 Multi-Units are ready-framed chalkboards, corkboards and displayboards designed for ease of installation and efficient use in the classroom. The units are completely framed in primary aluminum alloy and are ready to hang on the wall. The hangers provided with each unit are easily attached by means of Ackermann Anchors and the units are hung in place. The hangers can be provided in alternate locations so that units may be easily and quickly moved from one location to another or to locations in other rooms as required by the modern flexible activity centered classroom.

Green Hylopress Litesite is used for the chalkboard unit which has a map rail available as optional equipment. Holes are drilled on one-inch centers in the taupe displayboard to accommodate a variety of hooks, hangers and display racks. "Easy-Tilt" adjustment permits the units to adjust outward 11 inches from the bottom for ease in writing,



drawing or display. All units are available in modules of four—4 by 8 feet and 4 by 4 feet—for practical and economical classroom planning. Weber Costello Company, Chicago Heights, Ill.

For more details circle #5 on mailing card.

What's New . . .

Self-Closing Waste Receptacle Accessible From Any Direction

A unique stainless steel dome top, which swings freely inside the container, makes waste disposal possible from any



direction in the new Solar Jet self-closing waste receptacle. The newly designed round receptacle is available in two sizes, has an outer shell finished in white baked enamel with upper and lower reinforcing bands of stainless steel, long-lasting, heavy galvanized inner container with sturdy handle, and stainless steel legs to keep it 1/2 inch off ground or floor surfaces. The one-piece, lightweight outer shell lifts off easily to expose the inner refuse container equipped with a sturdy handle for ease in handling and emptying. The new receptacle is attractive in appearance, efficient in operation and easily kept clean. **Solar-Sturges Mfg. Div., Pressed Steel Car Company Inc., Melrose Park, Ill.**

For more details circle 26 on mailing card.

Black-Out Blind Has Ventilating Feature

Completely darkened rooms can be attained while still maintaining circulation of fresh air. Vendark Ventilating Black-Out Blinds are so constructed that the slats permit no light to penetrate, yet are arranged so as to permit circulation of air. They are particularly effective for use in auditoriums, classrooms, dark-rooms and other areas requiring complete darkness.

Vendarks are manufactured from durable, tough plastic and do not chip, fade or rust. They are unaffected by weak acids, alkalies and alcohol and are easily cleaned by washing with soap and warm water. **Victory Plastics Company, Hudson, Mass.**

For more details circle 27 on mailing card.

Modern Appliances for Home Economics

Home Economics departments in schools and colleges can now be equipped with the most modern home appliances for teaching. A new low cost school plan has recently been put into effect whereby schools may purchase Norge appliances at a special school discount rate and replace them at no extra cost with comparable newer models as they

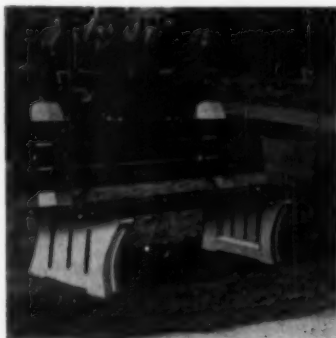
are released. All products purchased under the plan are covered by regular factory warranties.

The plan permits equipping home economics laboratories with the latest appliances at a low cost, and keeping equipment up to date for teaching. Appliances available under the plan include refrigerator-freezer combinations, automatic washers and dryers, gas and electric ranges, upright and vertical freezers, wringer washers and water heaters. **Norge, Merchandise Mart, Chicago 54.**

For more details circle 28 on mailing card.

Comfort and Stability in Outdoor Bench

The Colonial Park Bench has been redesigned for greater comfort and increased resistance to weather. The concrete forms making up the framework have been given additional reinforcement. The seat of the bench has been redesigned to conform to body contours.



A new type of paint used on the wood seat and back gives increased durability and withstands the elements. All units are carefully waterproofed. The sturdily constructed bench will give years of service and should have use in many areas on the campus. It is available in six, seven and eight foot lengths. **Altoona Concrete Products Co., Altoona, Pa.**

For more details circle 29 on mailing card.

Janitors' Wagon Has Spring-Steel Frame

Several new features are introduced in the new Janitor Service Wagon. It is equipped with white canvas or olive drab bag that is replaceable and washable. Metal grommets and drawstring permit quick and easy closure of the full bag when removing it from the frame. The spring-steel frame collapses into small space when the wagon is not in use. It is equipped with 2 inch hard composition casters but may be had with two 4 inch neoprene rubber wheels in back and two 2 inch wheels in front for easy rolling on carpeted or uneven floors. The wagon measures 20 by 19 inches and is 43 inches high with the bag open. **Meese, Inc., Madison, Ind.**

For more details circle 30 on mailing card.

Improved Models for Efficient Dishwashing

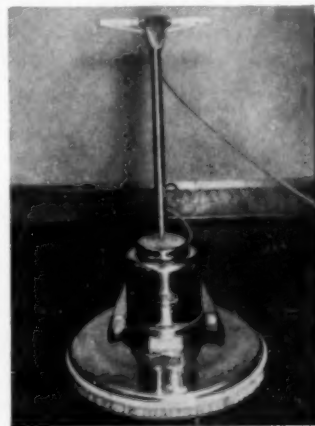
Several improvements have been made in two models of Jackson Dishwashers. Models 10A and 10M are basically alike except that Model 10A is designed for automatic operation. Both machines have stainless steel hoods and bases which resist deterioration by harsh detergents. Wash jet pressure has been greatly increased and the pressurized rinse tank utilizes static water pressure to ensure a heavy spray at the beginning of the rinse cycle. Wash and rinse thermometers are provided and a new built-in vacuum breaker prevents back siphonage into water supply lines.

Both models retain the Jackson features of revolving hood for straight through operation, thermostatically controlled immersion heater in the rinse reservoir and a sealed timer and switch mechanism on the automatic model. The average operating capacity of the new machines is 40 racks, 950 dishes or 1200 glasses per hour. **Jackson Products Co., 3700 E. 93rd St., Cleveland 5, Ohio.**

For more details circle 31 on mailing card.

Floor Machine Has Concentrated Weight

The Speedboy Model 24 floor and rug maintenance machine is exceptionally large for fast scrubbing and buffing. The brush diameter of 24 inches permits covering a large floor area with each whirl of the machine. The motor generates 1 1/2 h.p. and the machine is designed for use in large areas to do the job of cleaning floors and rugs faster and therefore at less cost. It is powered by the Advance Silent-Flo maintenance-free drive, has automatic raising



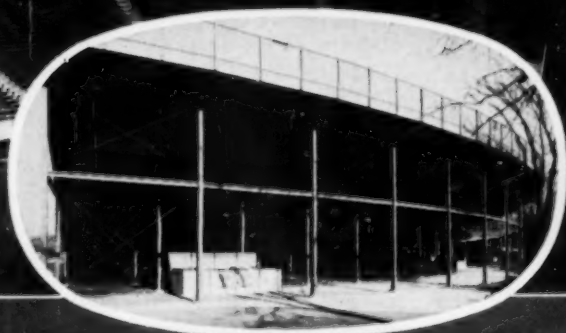
and lowering of wheels, dual control safety switch of new, simplified design, and handle fully adjustable up to vertical storage position. The Speedboy Model 24 polishes, waxes, scrubs, steel wools and shampoos. **Advance Machine Co., 2613 Fourth St. S. E., Minneapolis 14, Minn.**

For more details circle 32 on mailing card.

(Continued on page 72)

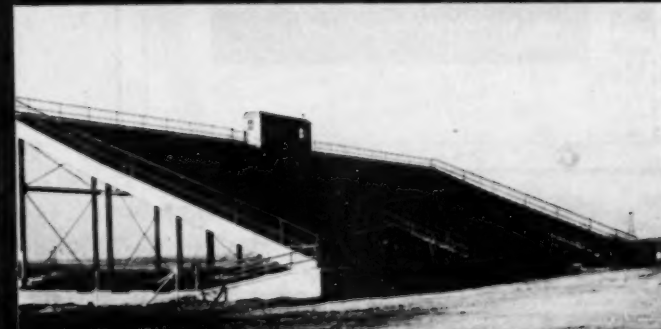
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What's New ...

Safety Floor Wax for Institutional Use

Du Pont's new Safety Floor Wax recently brought out for home use is now available in institutional sized cans. The wax produces a high gloss without rubbing but has a unique anti-slip action. Containing Ludox, the du Pont product developed for use in floor waxes to make them non-slip, Slip-Retardant Safety Floor Wax has a snubbing action which causes the forward motion of the foot to be absorbed quickly and safely, preventing slipping. Ludox gives the wax extra hardness while retaining the qualities of gloss, leveling and freeze-resistance. E. I. du Pont de Nemours & Co., Inc., Wilmington 98, Del.

For more details circle #13 on mailing card.

Improved Design and Construction for Popcorn Machine

Raymond Loewy Associates are the designers of the new model Cretors Popcorn Machine. Many improved construction and performance features are also built into the new model. Sidewalls of the cabinet are of one-piece armormply construction for extreme strength and durability. They are finished in a special shade of red expressly developed for Cretors. A special triple-plated, mirror-finish steel frame and special lighting

are features of the front of the machine. The popper case doors are of tempered glass with new magnetic catches. A stainless steel drop shelf with magnetic catches is also provided on the working side of the machine.

The Cretors champion 18 ounce steel kettle with replaceable heating elements;



a four cubic foot stainless steel elevator well holding the equivalent of 130 ten-cent boxes of popped corn beneath the level of the popper case; automatic push-button seasoning pump; forced-air heat circulation to keep the popped corn hot,

(Continued on page 74)

fresh and crisp, and controls conveniently grouped at eye level are some of the production features of the new machine. Cretors Corporation, P.O. Box 1329, Nashville, Tenn.

For more details circle #14 on mailing card.

Identification System Prevents Alterations

A new identification service for colleges and universities employs two photographic lenses. One lens photographs the master card carrying information required by the university or college and the personal information given by the student. A second lens photographs the student at the same time. A single negative, from which the finished identification card is printed, carries both data and photograph. Information on the card cannot be altered, erased or removed without damaging the card. Neither can the photograph be removed and another substituted since it is a part of the card itself.

The service is installed and handled by Perfect Photo Identification which does its own developing and printing of the passcards. Lamination of the cards can be used where permanent protection or heavy use makes it advantageous. Perfect Photo Identification, Inc., 1251 N. Ashland Ave., Chicago 22.

For more details circle #15 on mailing card.

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The thicker, installed-on-the-job plastic surfacing

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Color-Tuning— for Color Harmony

Consoweld is the only plastic laminate with patterns and colors based on the Cheskin Color System, developed by the Color Research Institute of America. Each Consoweld pattern and color has been carefully selected and preference-tested. This, plus a wide selection of beautiful wood grains, gives you just what you want for any color scheme or architectural style.

Twin Trim Matching Mouldings

New Consoweld mouldings are available to match perfectly of the color or wood grain of your choice. They offer an ideal answer for the large-area wall job where a feeling of unbroken expanse is desired.

Architects and builders have long recognized the advantages of plastic surfacing in school buildings . . . but widespread use of this easy-to-maintain surfacing has been limited by the high cost of pre-bonded panels. Now, Consoweld 10 solves this problem completely!

Consoweld 10 is two-thirds thicker than conventional plastic laminates. Knotholes, cracks or imperfections in the surface to be covered will not "telegraph" through to mar the finished beauty of a Consoweld 10 installation. You get a job that's smooth to the touch, smooth to the eye.

Result? On-the-job installation of plastic surfacing is practical for the first time. For example: in the photo above, some of the walls have Consoweld 10 applied directly to low-cost sheathing-grade plywood;

on others, over cinder block. You can't tell the difference . . . the finished job is beautiful, and it stays beautiful.

Your own cost records will tell you how you can save with a wall surfacing that never needs painting or refinishing, never gets the "run-down" look that means expensive redecorating. Before you build or remodel, find out about the first-cost savings of a Consoweld installation . . . and the maintenance savings that pile up year after year. Mail the coupon today—for more details on the complete versatility of new Consoweld 10!

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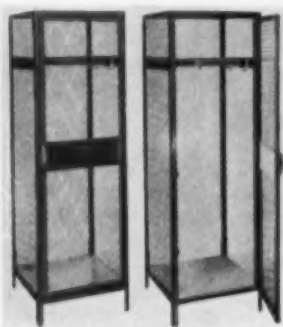
STATE _____

CU-114

What's New . . .

Air-Lite Locker Permits Ventilation

Maximum natural ventilation and visual inspection are provided with the new Penco all-mesh Air-Lite lockers. The 14 gauge expanded steel sides, back and



door have ¼ inch diamond-shaped openings. The lockers are safe and sturdy, furnished with coat hooks, number plates, chrome handles and choice of locks. They may be had in 15 single tier sizes and 10 double tier sizes, finished in green or gray baked enamel. They are especially effective for the private storage of uniforms and clothing requiring maximum air circulation. **Penn Metal Corporation of Penna., 50 Oregon Ave., Philadelphia 48, Pa.**

For more details circle #16 on mailing card.

Versatile Unit for Grounds Maintenance

Grounds care can be simplified with the new Jari Champion Mower. A feature of the new device is a "floating" Sickle Bar that follows the ground contour closely but automatically returns the bar to level position when raised to clear obstructions. The sickle bar can be guided with one hand. The wide-set, large wheels and low center of gravity keep the Champion from tipping even on steep slopes. Sickle bars are available in 36 and 44 inch lengths.

Lawn mower, sprayer and snow plow attachments are available for the new unit, thus making it a versatile, year-around maintenance device. The mower attachment can be used for heavy or light cutting, over rough or smooth ground, and will trim around flower beds and trees, under shrubbery and fences, and will cut brush, tall grass and weeds. **Jari Products, Inc., Minneapolis 8, Minn.**

For more details circle #17 on mailing card.

Small Sized Shower Head Is Self-Cleaning

A new small sized shower head has been added to the Anystream line. The S-2250 Model 3 is a self-cleaning unit equipped with an integral ball joint with a ½ inch I.P.S. female inlet. The de-



sired spray is readily selected by the bather by turning the lever handle on the shower head. Normal, needle or flood spray are quickly adjusted. **Speakman Company, Wilmington 99, Del.**

For more details circle #18 on mailing card.

Improved Process for Grape-Nuts Flakes

Crisper, sweeter whole wheat flakes are the result of the new process for producing Post's Grape-Nuts Flakes. The improved product stays crisp longer in milk or cream and has a distinctive new flavor. It is available in 1 ounce single-service packages. **General Foods, 250 North St., White Plains, N. Y.**

For more details circle #19 on mailing card.

Counter-Top Racks for Literature Display

Several new display racks for counter or table top have recently been introduced by Halverson Specialty Sales. A new counter-top magazine display rack, the 10-P, will accommodate 30 or more full-sized magazines conveniently and neatly. The all-steel Magazine Rack features practical tilt-backs to keep the magazines erect for easy selection and replacement. It has large capacity but is compactly constructed and is mounted on four rubber feet to prevent scratching.

A new six-tier display rack, also for counter or table top, has pockets for road



maps, booklets, brochures and other small sized literature. The 6-T also features tilt-back construction and is sturdily constructed of heavy-gauge steel, finished in hammerloid baked enamel. **Halverson Specialty Sales, 1221 W. Chestnut St., Chicago 22.**

For more details circle #20 on mailing card.

(Continued on page 76)

COLLEGE and UNIVERSITY BUSINESS

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The Tuition Plan was founded in 1938 to provide a method by which schools and colleges may grant the convenience of monthly payments while they receive their tuition and other fees in full at the beginning of the term.

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BOB JONES UNIVERSITY uses Mitchell 16 in its Cinema division which provides complete courses in film production.



MOODY INSTITUTE OF SCIENCE uses its own Mitchell 16mm camera in filming its "Sermons From Science" film series.



GULF COAST FILMS, INC. uses the 16mm Mitchell Camera in filming "100 Years In Texas" for Southern Pacific Railway.



CATHEDRAL FILMS use 2 Mitchell 16mm Cameras shooting simultaneously in color in filming their production "Holy Night."

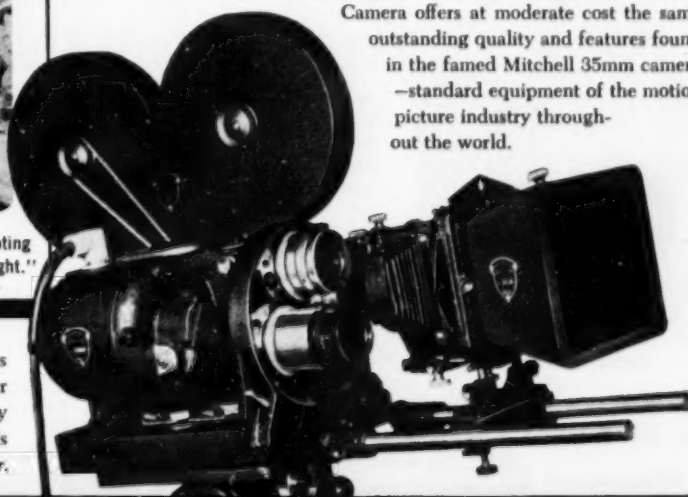
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Mitchell *

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Over 30 years ago Mitchell made history with the introduction of the motion picture camera that was to set new photographic standards for a growing industry. Today, Mitchell 16mm cameras are being used in every field of motion picture photography... Leading colleges, universities and schools throughout this country and abroad are currently using Mitchell cameras in their programs. They have

found that a Mitchell 16mm Professional Camera offers at moderate cost the same outstanding quality and features found in the famed Mitchell 35mm camera—standard equipment of the motion picture industry throughout the world.



...Today, as in the history-making years past, Mitchell cameras continue to deliver the world's finest films. That is why so many colleges, universities and schools count on Mitchell—the 30 year pioneer.

Mitchell Camera CORPORATION

666 West Harvard Street • Glendale 4, Calif. • Cable Address: "MITCAMCO"



85% of the professional motion pictures shown throughout the world are filmed with a Mitchell

What's New . . .

Tenderizing Machine Has Stainless Steel Housing

Model 702-SS U. S. Tendersteak Machine is a new stainless steel machine with stainless steel housing. It has re-designed cutting blades, improved knitting action and faster tenderizing action. It is designed to comply with the most rigid sanitation requirements and has no painted or enameled surfaces. The durable, heavy-gauge stainless steel housing is easy to keep clean and sanitary. U. S. Slicing Machine Company, Inc., LaPorte, Ind.

For more details circle #21 on mailing card.

Precast Concrete Stadium Offered at Nominal Cost

Steel forms are used to pre-cast sections of concrete to form Castadia pre-cast concrete stadiums. They offer a



safe, fireproof maintenance-free stadium at low construction cost. The sections are ready for immediate assembly and provide the advantages of monolithic

concrete stadiums at nominal cost.

Wide treads and solid construction allow ample leg room and keep cold draughts out of the stands. Castadia provides maximum grandstand space, gives a weather-resistant shelter for under-area storage and reduces maintenance costs. The under-area can be enclosed for use as showers, dressing rooms, rest rooms, storage or bus parking. Additional seating capacity can be added at any time. Steel-Crete Construction Co., 2242 N. 35th St., Milwaukee 8, Wis.

For more details circle #22 on mailing card.

Low-Cost Machine for Bookkeeping

The new 158 Bookkeeping Machine is a low-cost unit incorporating many features found in higher priced National accounting equipment. The front-feed carriage makes it possible to create ledger, statement and journal records simultaneously. Tabulation, opening and return to initial posting position are fully automatic. A control panel or form bar at the rear automatically causes the machine to add in debit columns, subtract in credit columns, "non-add" reference numbers and print the date in the proper column. The posting line on the machine is always visible to the operator so that any error may be instantly

(Continued on page 78)

seen. The versatile machine has many applications and may be used as a regular adding-subtracting unit. The National Cash Register Co., Dayton 9, Ohio.

For more details circle #23 on mailing card.

Wide Area Luminaire Is Shallow



The LPI Arealux is a shallow, wide area fluorescent luminaire designed for use wherever "low brightness contrast" interior lighting is needed. It can be surface mounted to the ceiling or suspended on hangers, singly, in continuous rows or side to side. The series 164 luminaire is 35 1/4 inches wide and only 5 inches deep. Top reflectors are available where only down light is desired. The Arealux, which is especially suitable for classroom, library and office lighting, is available in 4, 6 and 8 foot lengths. The louvers are hinged in 4 foot sections for easy relamping. They are finished in high gloss enamel for easy cleaning. Lighting Products, Inc., Highland Park, Ill.

For more details circle #24 on mailing card.

and Every Year

This Year Cut Your Floor Maintenance Costs

—use AMERICAN Machines, Supplies!

**SCRUB
POLISH
STEEL WOOL
DISC SAND
BUFF
GRIND**

A maintenance machine is a "good buy" only when it can save you time, labor and money in actual performance and the company behind the product can offer you real maintenance service. It's a mistake to buy on low bid alone. Compare the ability of the machine to solve the problem economically, efficiently . . . ease with which it can be operated . . . produce the desired results. You'll see why American DeLuxe is preferred by many of the largest industries who find it the *finest all-purpose heavy-duty floor maintenance machine* on the market.

FREE Consultation on your Floor Problems

Your nearby American distributor will gladly call and show you the American way to save money on floor maintenance—without obligation. He also offers instruction for operators to help you obtain maximum benefits with American machines.

SEND Today!

The American Floor Surfacing Machine Co.
590 So. St. Clair St., Toledo 3, Ohio

Send latest catalog on the following:

☐ DeLuxe Maintenance ☐ ALM 13 Maintenance ☐ Water Pick-up ☐ Wet or Dry Vacuum ☐ Belt Sander ☐ Sand, Fakes

☐ Please arrange for Free Consultation on my floor problems.

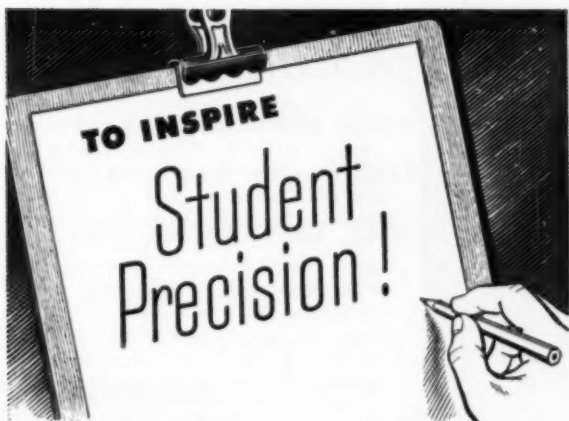
Name.....

Street.....

City.....State.....

AMERICAN **NATION-WIDE SERVICE**

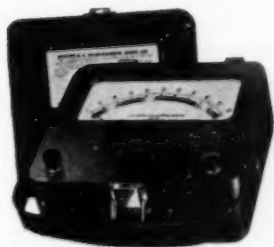
Performance Proved Machines



Preferred by instructors because they inspire students to new achievements . . . WESTON instruments also are the choice of practical administrators because their ruggedness and year after year dependability make their cost remarkably low! Ask for bulletin listing all instruments.

WESTON Electrical Instrument Corporation,
614 Frelinghuysen Avenue, Newark

For Advanced Requirements MODEL 622



Ultra sensitive instruments of the double pivoted type requiring no leveling when used in horizontal position. Combine high accuracy and a 6.1 inch scale . . . ideal for precise measurements of potential and current at very low energy levels. Available as d-c voltmeters, millivoltmeters, milliammeters and microammeters; electrolysis volt-millivoltmeters and high resistance voltmeters—also as a-c rectifier type instruments and as thermocouple ammeters, milliammeters and voltmeters.

For Electrical Machinery Labs MODEL 633

A clamp-on volt-ammeter built to Weston standards of safety, accuracy and dependability. Five full scale a-c current ranges of 1000/250/100/25/10 amperes with range overlap. Three self-contained a-c voltage ranges of 700/350/175 volts—insulated for 750 volts. Has convenient 6 position switch easily operated by thumb—adjustable pointer stop facilitates measuring starting current of motors.



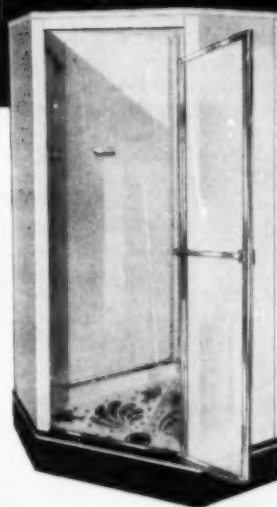
WESTON



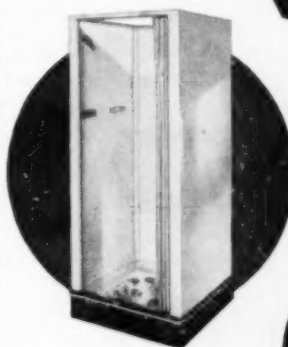
Instruments

Weisway CABINET SHOWERS

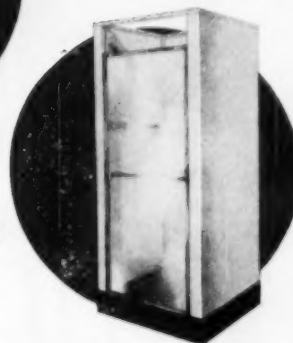
Quality Bathing Units For Every Purpose...



Corner entrance models save floor space. *Weisway V. P. Master* has walls and receptor of vitreous porcelain enamel for finest installations. Glass doors available on all Weisway models.



Weisway Standard has four-way protection and vitreous porcelain receptor—permanently leakproof.



Leakproof quality at moderate price is provided in the dependable *Weisway Budgeteer*.

Self-contained, leakproof Weisway Cabinet Showers, easily installed in new or old buildings, provide lasting service; end trouble and expense of frequent repairs and replacements. Vitreous porcelain enamel receptor, with Foot-Grip, No-Slip floor, is safe, sanitary non-absorbent—*will not rust*. Mail coupon for information on the complete Weisway line.

HENRY WEIS MFG. CO., INC., 1139 Weisway Bldg., Elkhart, Ind.
Please send literature and information on the complete line of Weisway Cabinet Showers.

Name _____
Address _____
City _____ State _____

What's New . . .

Simplified Installation in Electric Clock Systems

The entire line of electric clock and program systems developed by Sperti Faraday has been redesigned. The modern design of the new systems is attractive in appearance and suitable for installation with any room decoration. The master control units in all series carry complete mechanism for supervision and operation of accurate time and program systems. The two wire reset control sets all secondary clocks in unison, on the hour, to agree with the master clock and compensate for power interruptions. A spring-operated reserve power mechanism, which operates only during interruptions, keeps the controller and pilot clock running during power failures. Far-a-matic units offer the advantages obtained through years of manufacture and the redesigned line continues the tradition of reliability and service built up by the company. **Sperti Faraday Inc., Adrian, Mich.**

For more details circle 225 on mailing card.

Gas Cooking Equipment for Heavy Duty Use

The new line of Magic Chef super heavy duty commercial gas cooking equipment incorporates many new fea-

tures. It is designed to provide greater efficiency and convenience in kitchen operation and easier maintenance. Features of the equipment include functional "Flowline" shelf design permitting par-



tion-free, full length storage of utensils and easy cleaning. The range top burner box, oven, and oven burner box are fully protected with porcelain enamel linings. Formed steel construction with welded frame assemblies throughout the line give added strength and durability.

The new Magic Chef battery installation shown includes three gas ranges, deep fat fryer, unit broiler, baking and roasting oven and pizza oven. Other new pieces in the line include a griddle-broiler unit, add-a-units, double deck roasting oven and elevated broiler. **Magic Chef, Inc., 1641 S. Kingshighway Blvd., St. Louis 10, Mo.**

For more details circle 226 on mailing card.

(Continued on page 80)

Glassware Washers Developed for Laboratory Use

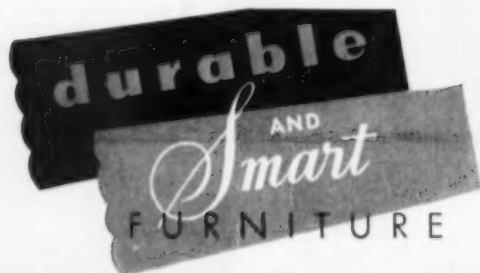
Specifically designed for processing glassware in laboratories, the new laboratory Glassware Washers are powered by high pressure jet systems of such efficiency that even capillary pipettes are readily penetrated. Three new models are offered in the new series, encompassing loads of the smallest to the largest laboratories. Culture media, organic and inorganic chemical deposits, oils waxes and other tenaciously clinging soil are removed by the new washers. The glassware is washed, rinsed and optionally rinsed in distilled water. **Heinicke Instruments, 2035 Harding St., Hollywood, Fla.**

For more details circle 227 on mailing card.

Air Conditioning System Cools or Heats

The Electriglas Twin-Features is designed to keep a room cool or warm, as circumstances indicate. It is an air conditioning unit with a radiant glass heat panel. The dual-purpose unit, for wall mounting or window insertion, is controlled by three switches for ventilating, air conditioning and heating action. A thermostat maintains any desired year round temperature. **Electriglas Corp., Bergenfield, N.J.**

For more details circle 228 on mailing card.



CAPTAIN'S CHAIR

No. 2077



This sturdy chair in authentic Early American will enhance the attractiveness and utility of student lounge or recreation rooms.

Heavy form-fitting scoop seat. Extremely comfortable and rugged.



For prices and complete information, see your dealer or write us.

MAXIM SNOW THROWERS

take the Work out of Winter

Cut your snow removal costs with powerful Maxim Snow Throwers. No pushing. No built-up banks. They eat into the snow and whirl it away. Four models, 4.6 to 46 h.p. 3000 in use today. All-year-round attachments for mowing, rolling, grading and grading. Write Dept. TW for full details.

THE MAXIM SILENCER COMPANY
88 HOMESTEAD AVENUE • HARTFORD 1, CONN.

24MXB4

How Owens-Illinois Glass Block* solved a maintenance problem while providing better light

WITH PANELS of glass block, daylight is directed upward and diffused over all parts of the school-room all day long. The combination of light-directing glass block and vision strip keep brightness at comfortable levels, provide vision and ventilation. Excessive glare and harsh contrasts are eliminated.



BEFORE

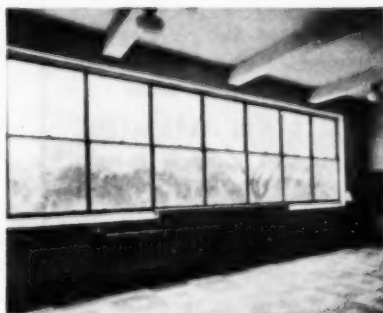
The Willard School, Highland Park, Michigan, is typical of many school buildings faced with worn-out window sash. Continual, expensive maintenance of the old sash did not provide proper protection from wintry blasts.



AFTER

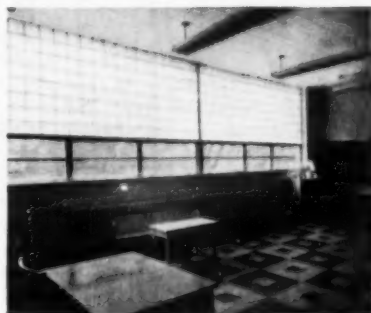
Willard School, Highland Park, Michigan
Architect: Louis G. Redstone; Contractor: William Bortolotti

Sash replacement began in 1951 with Owens-Illinois light-directing glass block. Now maintenance costs are practically eliminated. Glass block won't rust, rot or corrode... are hard to break.



OLD

windows needed constant, expensive maintenance... did not provide healthful daylighting throughout classrooms.



NEW

panels of glass block insulate so efficiently and daylight so effectively, heating and lighting costs are cut.

IF YOU ARE in the process of remodeling old structures, or building new ones, don't overlook the positive advantages—maintenance economies; better seeing conditions—that panels of glass block bring. For complete information write Kimble Glass Company, subsidiary of Owens-Illinois, Dept. CU-11, Toledo 1, Ohio.

*Formerly known as INSULUX

OWENS-ILLINOIS GLASS BLOCK
AN **II** PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

What's New . . .

Product Literature

• Information on the latest line of **sound equipment** brought out by RCA is given in an illustrated catalog published by the RCA Engineering Products Section, Radio Corporation of America, Camden, N.J. Descriptions of each model include such details as special features, uses, and specifications, and a list of products designed to meet needs from portable systems to large installations is also given.
For more details circle #29 on mailing card.

• A new bulletin illustrating **15 individual styles of canvas baskets, hampers and trucks** for institutional use, with complete dimensions given for all containers covered, has just been released by W. T. Lane & Bros., Inc. Poughkeepsie, N.Y. Included in the catalog are keyed detail photographs illustrating construction features, and a replaceable-parts section covering casters, duck body, shoe and cross-board styles and available caster arrangements.
For more details circle #30 on mailing card.

• Composition, special characteristics, color range size and installation data on **Vina-Lux Reinforced Vinyl Tile** is discussed in a new folder released by Uvalde Rock Asphalt Co., P. O. Box 531, San Antonio 6, Tex. A page is devoted to color reproductions of this fine flooring.
For more details circle #31 on mailing card.

• A completely furnished research classroom at the Daylighting Laboratory of the University of Michigan is described in detail in a comprehensive booklet, the "**Classroom of Tomorrow**." Issued by Kimble Glass Company, Toledo, Ohio, a subsidiary of Owens-Illinois Glass Co., and manufacturer of Owens-Illinois glass block, the booklet describes "the most advanced schoolroom in America today." The room provides complete flexibility in class arrangement, allows maximum freedom in design and decoration, and illustrates the achievement of a home-like atmosphere in a classroom.
For more details circle #32 on mailing card.

• A folder explaining the mechanical and heating advantages of the 1954 line of **Royal Jet's Forced-Flow and Jet-Flow Heating Units** is now offered by Royal Jet, Inc., 1024 Westminster Ave., Alhambra Calif. The folder also includes complete framing instructions.
For more details circle #33 on mailing card.

• A catalog containing descriptions and illustrations in color of the complete line of **Sanymetal Toilet Compartments and Shower Stalls and Dressing Rooms**, supplemented with detailed engineering data and architectural specifications, has just been released by The Sanymetal Products Co., Inc., 1705 Urbana Rd., Cleveland 12, Ohio.
For more details circle #34 on mailing card.

• A comprehensive handbook on the various types of **symmetric permafectors**, to help in selecting the proper silver-mirrored reflector for any type of application, has recently been announced by Pittsburgh Reflector Co., 419 Oliver Bldg., Pittsburgh 22, Pa. The bulletin gives detailed information on the various types of distribution available in symmetric permafectors and gives specifications, wattages and sizes.
For more details circle #35 on mailing card.

• Detailed descriptive information is given on the advantages of linoleum, rubber tile, vinyl asbestos tile and asphalt tile in a new **guide to smooth surface flooring materials** available for installation. Recently released by Congoleum-Nairn, Inc., 195 Belgrave Drive, Kearny, New Jersey, the guide gives information on the main types of under-floor construction and answers questions asked about floor coverings. A section on proper maintenance techniques is also included.
For more details circle #36 on mailing card.

• Bulletin No. 153-1, "**Instant**" Water Coolers, available through Frick Co., Waynesboro, Pa., has just been released. The Bulletin shows some of the most important uses of these coolers and gives the principle on which the Instant Cooler operates.
For more details circle #37 on mailing card.

(Continued on page 81)

NEW LOWER PRICES!

American Seating FOLDING CHAIRS Outlast all others!

Unequaled for
**STRENGTH • CONVENIENCE
COMFORT • SAFETY**

All with super-strength triangular-steel tubing construction and four steel cross braces shouldered and riveted.



3 popular seat styles!
Formed Birch Plywood
Formed Steel
Imitation-Leather
Upholstered

OVER 10 MILLION NOW IN USE! OUTNUMBER ALL OTHERS IN SCHOOL USE

MAIL COUPON TODAY!

AMERICAN SEATING COMPANY, Dept. 13 • Grand Rapids 2, Michigan

☐ Please send latest brochure on AMERICAN SEATING FOLDING CHAIRS.
☐ I am interested in _____ (quantity) ☐ Birch seats ☐ Steel seats
☐ Upholstered seats.

Name _____ Church _____
Street _____ School _____
City and Zone _____ State _____

NOW!



RENOVEX

The improved film cleaning
solution to give sharper
pictures and clearer sound

NON-TOXIC • FUMES ARE HARMLESS

No carbon-tell Approved everywhere.

- **ANTI-STATIC**—Dust won't adhere to RENOVEX treated film.
- **CLEANS — POLISHES — WAXES**—Insures smooth, clear, sharp projection.
- **CONDITIONS**—One application seasons "green sticky" prints.
- **REVITALIZES**—Puts new life in old film.
- **NON-INFLAMMABLE**—Will not burn—safe to use anywhere.

SEND FOR CATALOG
Complete film equipment

Est.
1916

TRADE MARK
Neumade
PRODUCTS CORP.

330 W. 42nd St., New York 18, N. Y.

What's New...



CARILLONIC BELLS or TUBULAR CHIMES?

MAAS MAKES BOTH!

SINGLE BELLS
PEALS • CARILLONIC SETS

Regardless of your needs you'll find it among our vast line of fine bell instruments starting as low as \$310

Over 25,000 installations attest their superiority. Get the facts before buying. Write for details.

MAAS-ROWE CARILLONS

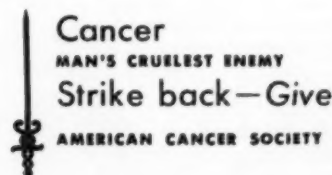
Dept. 36, 3015 Casitas Ave., Los Angeles 39, Calif.

WANTED for Murder...

CANCER is the cruellest enemy of all. No other disease brings so much suffering to Americans of all ages.

YET—though 23 million living Americans will die of cancer, at present rates—there is reason for hope. Thousands are being cured, who once would have been hopeless cases. Thousands more can have their suffering eased, their lives prolonged. And every day, we come closer to the final goal of cancer research: a sure and certain cure for all cancer.

THESE THINGS have all been helped by your donations to the American Cancer Society. This year, please be especially generous!



• A new catalog, "Index of Contemporary Design," has been published by Knoll Associates, Inc., 575 Madison Ave., New York 22. The 64 page book carries 132 illustrations in four colors and presents the international collection of Knoll furniture and textiles. The catalog is divided into four sections devoted to Chairs, Tables, Beds, Chests and Cabinets, and Textiles.

For more details circle #38 on mailing card.

• The story of "A New Workshop for Food Research" is told in a booklet released by The Fleischmann Division, Standard Brands Inc., 595 Madison Ave., New York 22. It describes the new, modern Fleischmann Laboratories recently opened in Stamford, Conn. Operations carried out in the 55 laboratory units in the new building are designed to keep uniformly high, or to improve the quality of foods products already being manufactured, to develop new food products and to improve the processing of both known and new foods.

For more details circle #39 on mailing card.

• A new booklet on "Dish Handling Plans for Cafeterias of Schools, Colleges and Universities" has just been released by Samuel Olson Mfg. Co., Inc., 2431-35 Bloomingdale Ave., Chicago 47. How tray and dish conveyors help to solve the dish handling problem is told in editorial text with pictures and diagrams of actual installations showing how the problem has been handled in various institutions.

For more details circle #40 on mailing card.

• The second in a series of brochures on woodwork, issued by the Architectural Woodwork Institute, 332 S. Michigan Ave., Chicago 4, deals with **Cabinet Work**. Brochure No. 2 is illustrated with photographs, architectural details and tables and explains the meaning of cabinet work in terms of general application. Illustrations include classrooms and kitchens among other applications.

For more details circle #41 on mailing card.

• An instructive and helpful booklet has been published by the Globe Automatic Sprinkler Co., 250 Park Ave., New York 17. Entitled, "How to Detect and Stop Fire Automatically," the booklet is offered "as a solution of your fire protection problems." How proper protection affects insurance costs is discussed and there is complete information on Globe Saveall Automatic Sprinklers and how and where they are installed.

For more details circle #42 on mailing card.

• A new manual 54-4 on Supremo Perfect Seal Cleanouts and Access Covers is now available from the J. A. Zurn Mfg. Co., Plumbing Div., Erie, Pa. A discussion of Code requirements and the importance of preventing "trouble zones" by the proper selection of locations for installation of cleanouts is given in the manual.

For more details circle #43 on mailing card.

(Continued on page 82)

ANOTHER FIVE-OCTAVE 61-BELL

"Arlington"

CARILLON INSTALLED AT THE
UNIVERSITY OF MINNESOTA,
MINNEAPOLIS



The growing acceptance of the "Arlington" Carillon is good news for colleges and universities. Schulmerich is the world's ONLY producer of modern bell instruments with both English and Flemish type tuning, as well as chimes—thus providing percussion instruments meeting the needs of any institution.

Both bell instruments have all the traditional partials, including the rich, colorful minor third, distinguishing a true bell tone from chimes, which lack this quality.

The Schulmerich "Arlington" Carillon is the ONLY modern bell instrument having the sub-octave humtone which together with its other partials identifies the Flemish type tuning. All types of harmony—major, minor, augmented and diminished chords or any other type of chord, arpeggio or trill can be played without restriction. With its 61 bells, 5-octave chromatic range, all types of carillonistic effects are possible, played from one keyboard. Individual expression, pedal-controls for bass and treble bells provide wide dynamic range for solo and accompaniment so necessary to true carillon music.

Truly, the "Arlington" is the 20th Century carillon, embodying the tradition and color of the finest cast bells. While retaining all the desirable features of cast bell carillons, undesirable factors such as tremendous weight, huge tower construction, keyboard limitations, complex automatic operation and enormous cost are eliminated.

If you've dreamed of the unfettered use of bells from the tower or with the organ, investigate the "Arlington" Carillon now! Write to:

SCHULMERICH CARILLONS, Inc.
280 Carillon Hill, Sellersville, Pa.

THE "Arlington"
CARILLON

A "Carillonistic Bells" INSTRUMENT

"Arlington" & "Carillonistic Bells" are trademarks for bell instruments of Schulmerich Carillons, Inc.

What's New . . .

• Record keeping and accounting for alumni associations, professional societies, fraternities and sororities and other organizations requiring membership control is discussed in a new folder, "Alumni Association Records," issued by International Business Machines Corp., 590 Madison Ave., New York 22. An IBM machine method for handling dues collection, active and non-active alumni lists, mailing lists and special reports and statistical studies is described with information on punched card records and procedures.

For more details circle #44 on mailing card.

• The story of "prizomatic" projection television is told in a folder released by Singer Television Mfg. Co., 944 W. Twelfth St., Los Angeles 15, Calif. How TV pictures are projected on a movie screen so that whole classes or schools can see the telecast is discussed in the folder.

For more details circle #45 on mailing card.

• A new booklet entitled, "Our Business Is Being Useful," has just been published by the Frigidaire Div. of General Motors Corp., Dayton, Ohio. The text outlines the company's essential role in conditioning air, water and food, and it contains illustrations of its commercial refrigeration and air conditioning products and the applications and uses.

For more details circle #46 on mailing card.

• A new instructive buying guide, known as Form 2164, is now being offered by Wyandotte Chemicals Corp., Wyandotte, Mich. The form lists 15 Wyandotte products for dishwashing, sanitation and maintenance operations with ideas which should either improve quality or lower costs, or both.

For more details circle #47 on mailing card.

• Accurate reproductions of twelve standard solid colors and eight two-tone patterns in Ing-Rich Porcelpanels are shown in a new color chart released by Ingram-Richardson Mfg. Co., Beaver Falls, Pa. Information on the Architectural Division of the company and its service in assisting in the design and application of porcelain enamel as an architectural material is included.

For more details circle #48 on mailing card.

• Air cleaning and control problems are discussed in a new bulletin recently released by Electro-Air Cleaner Co., 1285 Reedsdale St., Pittsburgh 33, Pa. The answer to this problem has been found with the recent development of inexpensive electronic equipment capable of effectively eliminating air-borne contamination. The new bulletin gives complete and detailed information on this equipment including construction features, specifications, dimensions and installation possibilities.

For more details circle #49 on mailing card.

• Complete information on the Kewanee Reserve Plus Rating Plan is given in a booklet entitled, "A Report to Those Concerned with the Specification, Selection, Sale of Steel Firetube Boilers." The booklet is published by Kewanee-Ross Corporation, Kewanee, Ill., to correct the confusion in the boiler industry caused by the variance in presentation of data concerning steel boiler ratings.

For more details circle #50 on mailing card.

Suppliers' News

Economics Laboratory, Inc., St. Paul, Minn., manufacturer of detergents, announces the opening of new executive offices for sales, marketing and advertising at 250 Park Ave., New York 17.

Reliable Metal Novelty Company, Inc., Mount Vernon, N. Y., manufacturer of bathroom accessories, announces the purchase from Conant Brothers Company, Inc., Medford, Mass., of the complete production tooling set-up and inventory of its forged brass bathroom accessories for installation in hospitals, schools and other institutional buildings.

Universal Dishwashing Machinery Co., Nutley, N. J., manufacturer of dishwashing equipment, announces the opening of a Western Branch show room and office at 2707 W. 54th St., Los Angeles 43, Calif.



Checkerette® "Fold-away Steel Rack"

Meet a dozen everyday school needs—in auditoriums, laboratories, gyms, cafeteria, shop, classrooms, library, etc. Goes anywhere. Set up in minute without tools. Stores away like folding chair when not in use. Holds wraps, gowns, athletic gear, band uniforms, choir robes, etc., in a compact and orderly manner. Rail can be placed at 3 different heights to accommodate different age groups, long robes, etc. Lifetime construction—welded heavy gauge box and "U" form sections; baked gray enamel finish. 4 ft. single faced unit takes 24 coat hangers; 4 ft. double faced unit 48. Three foot units also available.

Capacity can be doubled by using snap over coat hooks



Capacity can be doubled by using snap over coat hooks

Write for Bulletin CT16

VOGEL-PETERSON CO.

"The Coat Rack People"

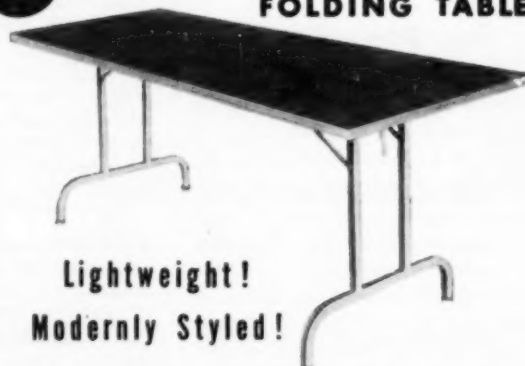
1121 West 37th Street

CHICAGO 9, ILL.



Hostess

Featherlight FOLDING TABLE



Lightweight!

Modernly Styled!

IT'S HERE! The finest folding banquet table introduced in years. BTC Hostess Featherlight Table is extremely lightweight without sacrificing strength or stability—6 ft. table with Formica top weighs only 45 lbs.; 8 ft. table weighs only 60 lbs.

Smartly-styled square tubular steel legs provide ample knee room at all sides. Table is ruggedly built with all-steel frame. Available with mar-resistant Tauplon or Formica top. Easiest table on the market to set up and take down. BTC Hand Trucks available for storing Hostess Featherlight Tables.

• Write for new color folder.

The BREWER-TITCHENER CORPORATION
CORTLAND, N.Y.



854*

A New H.I.G.H.*

IN GYMNASIUM FINISHES

Get "TWICE the WEAR"

WITH



GYM
FINISH

A revolutionary new "test tube" finish born in the Hillyard Research Laboratories has a tested abrasion index of 854 as compared to that of 355 held by the toughest finish known to date. (Resistance to abrasion scored in Testing Laboratories for the Maple Flooring Manufacturers Association.) Positive proof that TROPHY will give more than twice as many years' service as the best finish on the market.

Trophy takes the heavy constant wear of sports traffic for years longer . . . in scores of gymnasiums, field houses, on tournament floors. Its smooth glossy film resists the constant wearing action of players' feet . . . the grinding-in of daily dirt, staining from perspiration, grease and water. It cleans like a china dish, relieving you of costly labor time in maintenance. The beauty of its light, slip-resistant surface attests to its name, "The Tiffany of All Finishes."

Meets Every Demand of Gruelling Basketball Play and varied Sports Traffic.

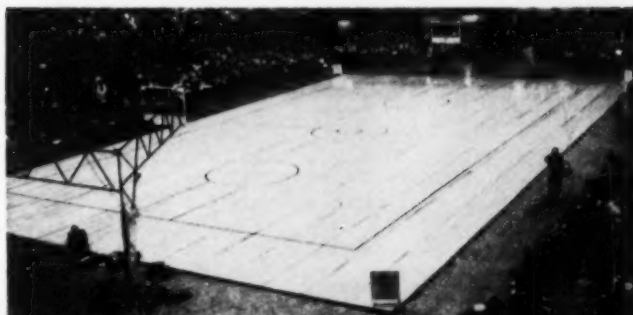
Your Hillyard Maintaineer is nearby to help with any special floor problem. He's "on Your Staff—Not Your Payroll."

HILLYARD CHEMICAL CO.
St. Joseph, Mo.

Passaic, N. J. • San Jose, Calif.
Branches in Principal Cities



- LIGHTEST FINISH KNOWN
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St. Joseph, Missouri

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PRODUCT INFORMATION

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WHAT'S NEW						ADVERTISEMENTS										
1	2	3	4	5	6	1	2	5	7	8, 9	10	11				
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43	44	45	46	47	48	Cov 2	Cov 3	Cov 4								
49	50															

NAME		TITLE	
INSTITUTION			
ADDRESS	CITY	ZONE	STATE

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19	20	21	22	23	24	61	62	63	64	65	66	67				
25	26	27	28	29	30	68	71	72	73	74	75	76				
31	32	33	34	35	36	77a	77b	78c	78d	79	80c	80d				
37	38	39	40	41	42	81a	81b	82c	82d	83	84					
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Key

- 1 Signet 500 Proj
Eastman K
- 2 Pedestal Base 1
Royal Meta
- 3 Duplex Straw
Duplex Str
- 4 Aluminum Awn
Ludman Co
- 5 Modular-4 Mul
Weber Co
- 6 Self-Closing W
Solar-Sturg
- 7 Ventilating Blin
Victory Pla
- 8 Norge Applian
Norge Div
- 9 Colonial Park
Altoona C
- 10 Janitor Service
Meese, Inc
- 11 Improved Dish
Jackson Pr
- 12 Speedboy Floo
Advance F
- 13 Safety Floor V
E. I. du Pa
- 14 Popcorn Mach
Cretors Co
- 15 Identification
Perfect Ph
- 16 Air-Lite Locker
Penn Meta
- 17 Champion Mo
Jari Produ

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Key

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Eastman Kodak Company

Pedestal Base Tables
Royal Metal Mfg. Co.

Duplex Straw Dispenser
Duplex Straw Dispenser Co.

Aluminum Awning Window
Ludman Corporation

Modular-4 Multi-Units
Weber Costello Co.

Self-Closing Waste Receptacle
Solar-Sturges Mfg. Div.

Ventilating Blind
Victory Plastics Co.

Norge Appliance Plan
Norge Division

Colonial Park Bench
Altoona Concrete Products Co.

Janitor Service Wagon
Meese, Inc.

Improved Dishwashers
Jackson Products Co.

Speedboy Floor Machine
Advance Floor Machine Co.

Safety Floor Wax
E. I. du Pont de Nemours & Co.

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General Foods

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21 Tendersteak Machine
U. S. Slicing Machine Co., Inc.

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Steel-Crete Construction Co.

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Lighting Products, Inc.

25 Electric Clock Systems
Sperti Faraday Inc.

26 Gas Cooking Equipment
Magic Chef, Inc.

27 Glassware Washers
Heinicke Instruments

28 Air Conditioning Unit
The Electriglas Corp.

29 Sound Equipment
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30 Catalog Number Four
W. T. Lane and Brothers, Inc.

31 Reinforced Vinyl Tile
Uvalde Rock Asphalt Co.

32 "Classroom of Tomorrow"
Kimble Glass Co.

33 Royal Jet Units
Royal Jet, Inc.

34 Toilet and Shower Compartments
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Key

35 "Symmetric Silver-Mirrored Reflectors"
Pittsburgh Reflector Co.

36 Flooring Materials
Congoleum-Nairn Inc.

37 "Instant" Water Coolers
Frick Co.

38 "Index of Contemporary Design"
Knoll Associates, Inc.

39 "A New Workshop for Food Research"
Standard Brands Inc.

40 "Dish Handling Plans"
Samuel Olson Mfg. Co., Inc.

41 Cabinet Work
Architectural Woodwork Institute

42 "Stop Fires Automatically"
Globe Automatic Sprinkler Co., Inc.

43 Cleanouts and Access Covers
J. A. Zurn Mfg. Co.

44 "Alumni Association Records"
International Business Machines Corp.

45 Projection Television
Singer Television Mfg. Co.

46 "Our Business Is Being Useful"
Frigidaire Division

47 Form 2164
Wyandotte Chemicals Corp.

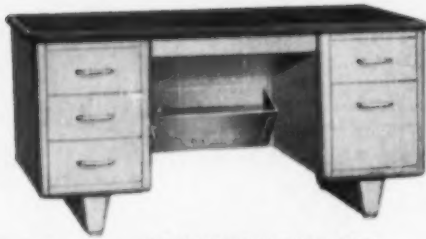
48 Parcellpanel Color Chart
Ingram-Richardson Mfg. Co.

49 Electronic Air Cleaners
Electro-Air Cleaner Co.

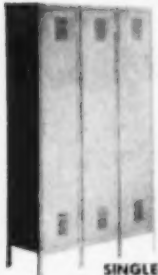
50 "Steel Firetube Boilers"
Kewanee-Ross Corp.

SMARTLY-STYLED SCHOOL FURNITURE...

RUGGEDLY-BUILT SCHOOL LOCKERS!



NO. 6629 PRINCIPAL'S DESK



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LOCKERS



NO. 6647 TEACHER'S DESK



DOUBLE-TIER
LOCKERS



NO. 810
UTILITY CHAIR



NO. 6276 LIBRARY TABLE



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TIER LOCKERS



NO. 5401 FILE

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PRICE RANGES



NO. 830 EXECUTIVE'S CHAIR



NO. 3487
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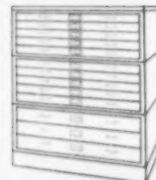
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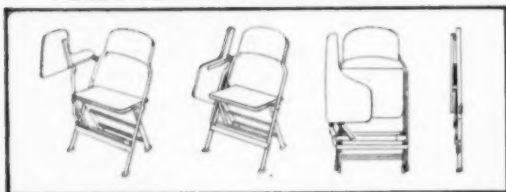
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